

**U. S. Department of Energy  
Federal Energy Technology Center**

3610 Collins Ferry Road  
P.O. Box 880  
Morgantown, WV 26507-0880

626 Cochran's Mill Road  
P.O. Box 10940  
Pittsburgh, PA 15236-0940



July 03, 1997

**EXECUTIVE SUMMARY LETTER  
PROGRAM RESEARCH AND DEVELOPMENT ANNOUNCEMENT  
DE-RA26-97BC15029**

**FUNDAMENTAL GEOSCIENCE FOR RESERVOIR CHARACTERIZATION**

To: Prospective Offerors

The purpose of this Executive Summary Letter is to highlight salient elements of the Program Research and Development Announcement (PRDA). This letter is not an integral part of the PRDA, which is a self-contained document. In the event of any conflict between the contents of the Executive Summary Letter and that of the PRDA, the PRDA language shall take precedence.

Areas of Interest: Through issuance of this PRDA, the Department of Energy's (DOE) National Petroleum Technology Office (NPTO) [formerly Bartlesville Project Office] seeks proposals that contain an interdisciplinary approach to the characterization of oil reservoirs through the use of basic and applied research. The specific area of program interest addressed by this solicitation is to provide an understanding and integration of a variety of data types at various scales, with the goal of quantifying reservoir heterogeneities. The purpose is the optimization of recovery efficiencies from oil reservoirs in a cost-effective and environmentally acceptable manner--as discussed in Part III, Section J, Attachment A, of the PRDA.

Eligibility: All responsible individuals, corporations, non-profit organizations, educational institutions, and state or local governments may submit proposals for consideration. Proposals which include performance at any level by DOE Management & Operating (M&O) Contractors are inappropriate for this competition and shall be determined ineligible for award, as addressed in Section L.1 of the PRDA.

Cost-Share: Offerors are advised that a mandatory minimum cost-share of twenty (20) percent of the total estimated project cost is required; if during the preliminary proposal review it is found that the offeror does not satisfy the cost share requirement as set forth in Section L.1 of the solicitation, the proposal will not be comprehensively reviewed and thus shall not be considered for award (see Section M.3(a)).

The Government does not anticipate providing any facilities or property for accomplishing this effort. Offerors are encouraged to propose utilization of existing facilities and to make allowances for providing all necessary personnel, facilities, equipment and materials to complete proposed projects.

Proposals must be prepared and submitted in accordance with the requirements of the PRDA (see L.13 and L.14). Offerors are also advised to give particular attention to the evaluation criteria identified in Part V, Section M. Proposals must be received by 4:00 PM local prevailing time, September 2, 1997 at:

U. S. DEPARTMENT OF ENERGY  
NATIONAL PETROLEUM TECHNOLOGY OFFICE  
WILLIAMS CENTER, TOWER ONE  
ONE WEST 3RD STREET, SUITE 1658  
TULSA, OK 74103  
ATTN: DIANE FRANKLIN, CONTRACTS OFFICE

Late proposals, modifications and withdrawals will be treated in accordance with FAR 52.215-10 (see L.15 of this PRDA).

Proposals received in response to this solicitation will be evaluated by a proposal evaluation panel in accordance with applicable DOE acquisition policies and procedures. Evaluation will be performed to determine the offeror's understanding of work to be performed, technical approach, potential for completing the work as specified in the solicitation, cost reasonableness, probable cost to the Government, and ranking with competitive offers. The Source Selection Official (SSO) will select a mix of proposals for award from the findings of the proposal evaluation panel, and will take into account the relative technical, business/management, environmental, and cost rankings, as well as applicable program policy factors in determining which proposals best satisfy program objectives.

The Government intends that multiple cost-share contracts will result from this PRDA. (Sections A through K of the PRDA comprise the "model" contract to be used for award. NOTE: Sections I and J-Atts. A and B of the "model" contain pertinent clauses and information relative to proposal submission.) It is anticipated that individual awards will range up to \$250K per year, per contract, with a duration of up to thirty-six (36) months, depending on the level of effort of the particular concept being proposed. Thus, the total estimated cost of a 36-month effort might range from \$450-750K. This does not preclude consideration of shorter project periods and lower estimated costs. It is further anticipated that selections will be made in the first quarter of the government fiscal year 1998 and awards made during the second quarter.

Any prospective offeror seeking an explanation or interpretation of the solicitation must request it in writing, in sufficient time to allow a reply to reach all prospective offerors before the submission of their offers (see L.8 of the solicitation). The information will be furnished as an amendment of the solicitation, if the information is necessary in submitting offers or if lack of it would be prejudicial to other prospective offerors. Amendments to this PRDA, if any, will be posted on the World Wide Web at: <http://www.fetc.doe.gov> (this is the new "home page" of the Federal Energy Technology Center (FETC)).

Il communications concerning this PRDA shall cite the PRDA number (DE-RA26-97BC15029) and be directed in writing to the attention of:

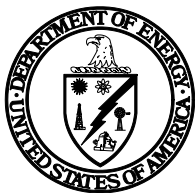
DONA G. SHEEHAN, CONTRACT SPECIALIST  
U. S. DEPARTMENT OF ENERGY  
FEDERAL ENERGY TECHNOLOGY CENTER  
P. O. BOX 10940, M.S. 921-143  
PITTSBURGH, PA 15236-0940  
FAX: (412) 892-6216  
E-MAIL: sheehan@fetec.doe.gov

Your interest in this solicitation is appreciated.

Sincerely,

/original signed by/

Keith R. Miles  
Contracting Officer  
Acquisition & Assistance Division



**U. S. Department of Energy  
Federal Energy Technology Center**

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**PROGRAM RESEARCH AND DEVELOPMENT ANNOUNCEMENT (PRDA)**

**NUMBER DE-RA26-97BC15029**

**FUNDAMENTAL GEOSCIENCE FOR RESERVOIR CHARACTERIZATION**

<b>ISSUANCE DATE:</b>	<b>July 03, 1997</b>
<b>CLOSING DATE:</b>	<b>SEPTEMBER 02, 1997 4:00 P.M.</b>
<b>POINT OF CONTACT:</b>	<b>DONA G. SHEEHAN ACQUISITION &amp; ASSISTANCE DIV. U.S. DOE FETC P.O. BOX 10940, MS 921-143 PITTSBURGH, PA 15236-0940</b>
<b>TELEPHONE:</b>	<b>412/892-5918</b>
<b>FACSIMILE:</b>	<b>412/892-6216</b>
<b>INTERNET:</b>	<b>sheehan@fetcdoe.gov</b>

**SEE SECTION L.14 FOR ADDRESS FOR SUBMISSION OF OFFERS TO THE DOE  
NATIONAL PETROLEUM TECHNOLOGY OFFICE, TULSA, OKLAHOMA**

TABLE OF CONTENTS  
PRDA DE-RA26-97BC15029  
FUNDAMENTAL GEOSCIENCE FOR RESERVOIR CHARACTERIZATION

PART I

SECTION A - SF 33, SOLICITATION, OFFER AND AWARD

SECTION B - SUPPLIES, SERVICES AND PRICES

B.1 ITEMS BEING ACQUIRED

B.2 COST SHARING ARRANGEMENT

B.3 CONTRACTOR/THIRD PARTY IN-KIND CONTRIBUTIONS

B.4 VALUATION OF IN-KIND CONTRIBUTION

SECTION C - DESCRIPTION/SPECIFICATION/STATEMENT OF WORK

C.1 STATEMENT OF WORK

C.2 ITEM DESCRIPTION

C.3 RESULTS OF SCIENTIFIC AND TECHNICAL WORK SUPPORTED BY DOE

SECTION D - PACKAGING AND MARKING

D.1 PACKAGING

D.2 MARKING

SECTION E - INSPECTION AND ACCEPTANCE

E.1 INSPECTION

E.2 INSPECTION OF RESEARCH AND DEVELOPMENT (SHORT FORM) (FAR 52.246-9,  
APR 1984)

E.3 ACCEPTANCE

SECTION F - DELIVERIES OR PERFORMANCE

F.1 COMPLETION DATES

F.2 PRINCIPAL LOCATION(S) OF PERFORMANCE

SECTION G - CONTRACT ADMINISTRATION

G.1 CORRESPONDENCE PROCEDURES

G.1(a) TECHNICAL CORRESPONDENCE

G.1(b) PROPERTY CORRESPONDENCE

G.1(c) INDIRECT RATE CORRESPONDENCE

G.1(d) OTHER CORRESPONDENCE

G.1(e) CONTRACT SPECIALIST'S ADDRESS

G.1(f) SUBJECT LINE(S)

- G.2 DOE CONTRACT SPECIALIST FOR POST-AWARD ADMINISTRATION
- G.3 DOE CONTRACTING OFFICER'S REPRESENTATIVE (COR) FOR POST-AWARD ADMINISTRATION
- G.4 DOE PROPERTY ADMINISTRATOR FOR POST-AWARD ADMINISTRATION
- G.5 DOE INTELLECTUAL PROPERTY COUNSEL
- G.6 CONTRACTING OFFICER FOR INDIRECT COST RATE MANAGEMENT
- G.7 BILLING INSTRUCTIONS - COST-TYPE CONTRACT
- G.8 DEFECTIVE OR IMPROPER INVOICES
- G.9 NOTICE OF INVOICE PROCESSING BY SUPPORT CONTRACTOR
- G.10 INDIRECT RATES - BILLING
- G.11 INDIRECT RATES - FINAL

## SECTION H - SPECIAL PROVISIONS

- H.1 TRAVEL AND PER DIEM COSTS
- H.2 LIMITATION OF FUNDS (FAR 52.232-22, APR 1984)
- H.3 TECHNICAL DIRECTION
- H.4 MODIFICATION AUTHORITY
- H.5 GOVERNMENT PROPERTY AND DATA
- H.6 KEY PERSONNEL
- H.7 SUBCONTRACTS
- H.8 CONTRACTOR'S PROGRAM MANAGER
- H.9 RESERVED
- H.10 REPRESENTATIONS AND CERTIFICATIONS
- H.11 SUBCONTRACTOR FACILITIES CAPITAL COST OF MONEY
- H.12 COMPLIANCE WITH APPLICABLE FEDERAL, STATE AND LOCAL REQUIREMENTS
- H.13 NOTIFICATION OF ENVIRONMENT, SAFETY AND HEALTH VIOLATIONS
- H.14 NOTIFICATION OF SPILL OR UNREGULATED RELEASE
- H.15 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) - PRIOR APPROVALS
- H.16 TOXIC CHEMICAL RELEASE INVENTORY

## PART II

### SECTION I - CONTRACT CLAUSES

## PART III

### SECTION J - LIST OF ATTACHMENTS

- ATTACHMENT A - PRDA PROGRAM AREAS OF INTEREST
- ATTACHMENT B - REPORTING REQUIREMENTS CHECKLIST AND INSTRUCTIONS
- ATTACHMENT C - BILLING INSTRUCTIONS
- ATTACHMENT D - LIST OF GOVERNMENT PROPERTY-CONTRACTOR ACQUIRED
- ATTACHMENT E - LIST OF GOVERNMENT-FURNISHED PROPERTY
- ATTACHMENT F - SUBCONTRACT PLAN

## PART IV

### SECTION K - REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF BIDDERS/OFFERORS

- K.1 CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS (FAR 52.203-11, APR 1991)
- K.2 WOMEN-OWNED BUSINESS (FAR 52.204-5, OCT 1995)
- K.3 CERTIFICATION OF NONSEGREGATED FACILITIES (FAR 52.222-21, APR 1984)
- K.4 TAXPAYER IDENTIFICATION (FAR 52.204-3, MAR 1994)
- K.5 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (FAR 52.209-5, MAR 1996)
- K.6 TYPE OF BUSINESS ORGANIZATION (FAR 52.215-6, JUL 1987)
- K.7 AUTHORIZED NEGOTIATORS (FAR 52.215-11, APR 1984)
- K.8 PERIOD FOR ACCEPTANCE OF OFFER (FAR 52.215-19, APR 1984)
- K.9 PLACE OF PERFORMANCE (FAR 52.215-20, APR 1984)
- K.10 SMALL BUSINESS PROGRAM REPRESENTATIONS (FAR 52.219-1, JAN 1997)
- K.11 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FAR 52.222-22, APR 1984)
- K.12 AFFIRMATIVE ACTION COMPLIANCE (FAR 52.222-25, APR 1984)
- K.13 CLEAN AIR AND WATER CERTIFICATION (FAR 52.223-1, APR 1984)
- K.14 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (FAR 52.223-13, OCT 1996)
- K.15 REPRESENTATION OF LIMITED RIGHTS DATA AND RESTRICTED COMPUTER SOFTWARE (FAR 52.227-15, JUN 1987)
- K.16 COST ACCOUNTING STANDARDS NOTICES AND CERTIFICATION (FAR 52.230-1, APR 1996)
- K.17 TECHNICAL DATA CERTIFICATION (DEAR 952.227-80, APR 1984)
- K.18 ROYALTY PAYMENTS CERTIFICATION (DEAR 952.227-81, APR 1984)
- K.19 HISTORICALLY BLACK COLLEGES AND UNIVERSITIES (52.226-2)
- K.20 ENERGY POLICY ACT TARGET GROUP CERTIFICATION (952.226-73)
- K.21 SIGNATURE/CERTIFICATION

## PART V

### SECTION L - INSTRUCTIONS, CONDITIONS AND NOTICES TO OFFERORS

#### L.1 GENERAL

- L.1(a) ELIGIBILITY
- L.1(b) COST-SHARING
- L.1(c) LEVEL OF EFFORT

#### L.2 SOLICITATION DEFINITIONS (FAR 52.215-5, JUL 1987)

#### L.3 AMENDMENTS TO SOLICITATIONS (FAR 52.215-8, DEC 1989)

#### L.4 RESERVED

- L.5 RESERVED
- L.6 RESERVED
- L.7 INTENTION TO PROPOSE
- L.8 EXPLANATION TO PROSPECTIVE OFFERORS (FAR 52.215-14, APR 1984)
- L.9 INQUIRIES
- L.10 RESERVED
- L.11 CLASSIFIED MATERIAL
- L.12 RESERVED
- L.13 PROPOSAL PREPARATION INSTRUCTIONS
  - L.13(a) GENERAL
  - L.13(a)(1) OVERALL ARRANGEMENT OF PROPOSAL.
  - L.13(a)(2) UNNECESSARILY ELABORATE PROPOSALS OR QUOTATIONS (FAR 52.215-7, APR 1984)
  - L.13(a)(3) FALSE STATEMENTS
  - L.13(a)(4) RIGHTS IN TECHNICAL DATA SOLICITATION INSTRUCTION (DEAR 952.227-83, APR 1984)
  - L.13(a)(5) RESTRICTION ON DISCLOSURE AND USE OF DATA (FAR 52.215-12, APR 1984)
  - L.13(a)(6) EXPENSES RELATED TO PROPOSAL OR BID SUBMISSIONS
  - L.13(a)(7) OFFER ACCEPTANCE PERIOD
  - L.13(b) PREPARATION INSTRUCTIONS: VOLUME I - OFFER AND OTHER DOCUMENTS
  - L.13(b)(1) FORMAT AND CONTENT
  - L.13(c) PREPARATION INSTRUCTIONS: VOLUME II - TECHNICAL PROPOSAL
  - L.13(c)(1) FORMAT AND CONTENT
  - L.13(d) PREPARATION INSTRUCTIONS: VOLUME III - COST PROPOSAL
  - L.13(d)(1) FORMAT AND CONTENT
  - L.13(d)(2) CERTIFIED COST OR PRICING DATA
  - L.13(d)(3) MODIFICATIONS TO COST PROPOSAL
  - L.13(e) VOLUME IV - ENVIRONMENTAL, HEALTH, SAFETY AND SOCIETY IMPACT
  - L.13(e)(1) FORMAT AND CONTENT (GUIDELINES FOR COMPLETING THE ENVIRONMENTAL ASSESSMENT QUESTIONNAIRE)
- L.14 SUBMISSION OF OFFER (FAR 52.215-9, MAR 1997)
- L.15 LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF OFFERS (FAR 52.215-10, MAY 1997)
- L.16 FAILURE TO SUBMIT OFFER (FAR 52.215-15, MAY 1997)
- L.17 NUMBER OF AWARDS
- L.18 CONTRACT AWARD (OCT 1995) -- Alternate II (FAR 52.215-16, OCT 1995)
- L.19 DISCUSSIONS WITH OFFERORS
- L.20 CONTENT OF RESULTING CONTRACT
- L.21 AWARD INFORMATION
- L.22 PREAWARD ON-SITE EQUAL OPPORTUNITY COMPLIANCE REVIEW (FAR 52.222-24, APR 1984)
- L.23 AGENCY PROTEST REVIEW (DEAR 952.233-5, SEP 1996)
- L.24 SERVICE OF PROTEST (FAR 52.233-2, AUG 1996; DEAR 952.233-2, AUG 1996)
- L.25 NOTICE OF PROTEST FILE AVAILABILITY (DEAR 952.233-4, SEP 1996)



## SECTION M - EVALUATION FACTORS FOR AWARD

### M.1 GENERAL

### M.2 EVALUATION CRITERIA AND RELATIVE IMPORTANCE, VOLUMES I THROUGH IV

- M.2(a) VOLUME I - OFFER AND OTHER DOCUMENTS (BUSINESS AND MANAGEMENT)
- M.2(b) VOLUME II - TECHNICAL
- M.2(c) VOLUME III - COST
- M.2(d) VOLUME IV - ENVIRONMENTAL

### M.3 PROCESS

- M.3(a) PRELIMINARY REVIEW
- M.3(b) COMPREHENSIVE EVALUATION AND RANKING

### M.4 APPLICATION OF PROGRAM POLICY FACTORS AND SELECTION

- M.4(a) PROGRAM POLICY FACTORS
  - M.4(b) SELECTION
- 

## APPENDICES

- APPENDIX I INTENTION TO PROPOSE
- APPENDIX II PROPOSAL COVER SHEET/CERTIFICATION
- APPENDIX III ABSTRACT (Recommended Format)
- APPENDIX IV SF1411 CONTRACT PRICING PROPOSAL COVER SHEET AND INSTRUCTIONS
- APPENDIX V NPTO ENVIRONMENTAL ASSESSMENT QUESTIONNAIRE

<b>SOLICITATION, OFFER AND AWARD</b>		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350) ▶		RATING		PAGE OF 1 157 PAGES			
2. CONTRACT NO. N/A		3. SOLICITATION NO. DE-RA26-97BC15029		4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (PRDA)		5. DATE ISSUED July 03, 1997		6. REQUISITION/PURCHASE NO. 26-97BC15029.000	
7. ISSUED BY U.S. DEPARTMENT OF ENERGY, FEDERAL ENERGY TECHNOLOGY CENTER P. O. BOX 10940, MS 921-143, PITTSBURGH, PA 15236-0940 ATTN.: DONA G. SHEEHAN E-MAIL: sheehan@fetc.doe.gov				8. ADDRESS OFFER TO (If other than Item 7) SEE SECTION L, L.14					

NOTE: In sealed bid solicitations, "offer" and "offeror" mean "bid" and "bidder."

**SOLICITATION**

9. Sealed offers in original and <u>see L.13</u> copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in <u>see Section L, L.14</u> until <u>4:00 PM</u> local time <u>SEP 2, 1997</u> . (Hour) (Date)		
CAUTION — LATE Submissions, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-10. All offers are subject to all terms and conditions contained in this solicitation.		
10. FOR INFORMATION CALL: ▶	A. NAME : DONA G. SHEEHAN, CONTRACT SPECIALIST (sheehan@fetc.doe.gov)	B. TELEPHONE NO. (Include area code) (NO COLLECT CALLS) (412) 892-5918 FAX (412) 892-6216

**11. TABLE OF CONTENTS**

(✓)	SEC.	DESCRIPTION	PAGE(S)	(✓)	SEC.	DESCRIPTION	PAGE(S)
PART I — THE SCHEDULE				PART II — CONTRACT CLAUSES			
X	A	SOLICITATION/CONTRACT FORM	1	X	I	CONTRACT CLAUSES	4
X	B	SUPPLIES OR SERVICES AND PRICES/COSTS	2	PART III — LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.			
X	C	DESCRIPTION/SPECS./WORK STATEMENT	1	X	J	LIST OF ATTACHMENTS	78
X	D	PACKAGING AND MARKING	1	PART IV — REPRESENTATIONS AND INSTRUCTIONS			
X	E	INSPECTION AND ACCEPTANCE	1	X	K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS	15
X	F	DELIVERIES OR PERFORMANCE	1				
X	G	CONTRACT ADMINISTRATION DATA	4	X	L	INSTRS., CONDS., AND NOTICES TO OFFERORS	36
X	H	SPECIAL CONTRACT REQUIREMENTS	7	X	M	EVALUATION FACTORS FOR AWARD	6

**OFFER (Must be fully completed by offeror)**

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within <u>180</u> calendar days (60 calendar days unless a different period is inserted by the offeror) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.						
13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52.232-8) ▶		10 CALENDAR DAYS %	20 CALENDAR DAYS %	30 CALENDAR DAYS %	CALENDAR DAYS %	
14. ACKNOWLEDGMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated:		AMENDMENT NO.	DATE	AMENDMENT NO.	DATE	
15A. NAME AND ADDRESS OF OFFEROR		CODE	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)		
15B. TELEPHONE NO. (Include area code)		15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE — ENTER SUCH ADDRESS IN SCHEDULE <input type="checkbox"/>		17. SIGNATURE		18. OFFER DATE

**AWARD (To be completed by Government)**

19. ACCEPTED AS TO ITEMS NUMBERED		20. AMOUNT		21. ACCOUNTING AND APPROPRIATION		
22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: <input type="checkbox"/> 10 U.S.C. 2304(c) ( ) <input type="checkbox"/> 41 U.S.C. 253(c) ( )				23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified) ▶		ITEM
				25. PAYMENT WILL BE MADE BY		CODE
24. ADMINISTERED BY (If other than Item 7) CODE				27. UNITED STATES OF AMERICA (Signature of Contracting Officer)		28. AWARD DATE
26. NAME OF CONTRACTING OFFICER (Type or print)						

IMPORTANT — Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice.

## PART I

### SECTION B - SUPPLIES, SERVICES, AND PRICES

#### B.1 ITEMS BEING ACQUIRED

The Contractor shall furnish all personnel, facilities, equipment, material, supplies, and services (except as may be expressly set forth in this contract as furnished by the Government) and otherwise do all things necessary for, or incident to, the performance of the following items of work:

Item 1 -- Research entitled "[TBD]" in accordance with Part III, Section J, Attachment A, Statement of Work.

Item 2 -- Reports prescribed in "Reporting Requirements Checklist (DOE F 1332.1)" in accordance with Part III, Section J, Attachment B.

#### B.2 COST SHARING ARRANGEMENT

- (a) The total estimated cost is \$[TBD], based upon the following cost sharing percentages.

Government	\$ [TBD]	[TBD]%
Contractor	\$ [TBD]	[TBD]%
Total	\$ [TBD]	100.00%

- (b) The cost participation formulas stipulated under this clause shall be applied to actual allowable contract costs incurred as a whole rather than to any individual element of cost. As stipulated in Section G. 7, Billing Instructions, the cost sharing ratio established in this contract will be applied to each and every invoice.
- (c) In its vouchers and contract cost and/or financial reports, the Contractor shall separately identify: 1) the total allowable costs incurred, 2) the allowable costs incurred to be borne by the Government (dollars and percentages), and 3) the allowable costs to be borne by the Contractor (dollars and percentages) (see Part III, Section J, Attachment C, Billing Instructions).
- (d) Cost Sharing of Cost Overruns. The Government funding of cost overruns is subject to availability of funds and FAR 52.232-22 "Limitation of Funds". While it is the purpose of this contract to complete all work within the funds provided in the original or amended award amount, it is hereby agreed that the provision of any funds for the financing or reimbursement of any allowable and allocable cost overruns, which may be incurred in the performance of this contract, shall be subject to cost sharing by the Government and Contractor in accordance with the respective percentages indicated in paragraph (a) above.

The Contractor shall not be obligated to continue performance under the contract (including actions under the termination clause) or otherwise to incur cost in excess of the estimated total cost unless and until the Contracting Officer shall have modified the contract to fund the Government's share.

- (e) Fee. No fee shall be payable to the contractor for the performance of work under any Item of this contract.
- (f) Notwithstanding the Contractor's sharing in the allowable costs to be incurred under this contract, the Government shall have the same rights under this contract as if the Government had borne one-hundred percent (100%) of the allowable costs of performance.

### B.3 CONTRACTOR/THIRD PARTY IN-KIND CONTRIBUTIONS

- (a) The value of in-kind contributions donated by the contractor and/or third party contributors is established in B.4, below.
- (b) In-kind contributions (i.e. services, facility use, etc.) shall be identified on each invoice submitted by the contractor only for the period in which these donated services are actually utilized in performance of this project.
- (c) Maximum values are established in B.4, below, for each in-kind contribution that will be donated toward this project. This maximum amount cannot be exceeded without prior written approval of the Contracting Officer.
- (d) The Contractor shall be required to maintain the same accounting records and the Government shall have the same rights to audit all Clause B.4 costs associated with these Contractor and/or third party in-kind contributions in this contract.

### B.4 VALUATION OF IN-KIND CONTRIBUTIONS

The Contractor shall, as their in-kind contribution under this contract, provide and furnish the following items as necessary to perform the Statement of Work (Part III, Section J, Attachment A):

[TBD]

The value of these in-kind contributions have been established in accordance with the DEAR 917.7007, In-Kind Contributions.

## SECTION C - DESCRIPTION/SPECIFICATION/STATEMENT OF WORK

### C.1 STATEMENT OF WORK

The Statement of Work is located in Part III, Section J, Attachment A to this contract.

### C.2 ITEM DESCRIPTION

Item 1 - Research entitled, "[TBD]," in accordance with Part III, Section J, Attachment A, Statement of Work.

Item 2 - Reports as prescribed in the "Reporting Requirements Checklist (DOE F 1332.1)," Part III, Section J, Attachment B.

### C.3 RESULTS OF SCIENTIFIC AND TECHNICAL WORK SUPPORTED BY DOE

The Contractor shall provide one reproducible master plus one copy of documents (includes such items as scientific and technical reports, journal article reprints, conference papers and proceedings, theses, translations, etc.) which communicate the results of scientific and technical work supported by DOE, whether or not specifically identified in the contract.

In addition, the Contractor shall provide one replicable diskette in accordance with the instructions in Part III - Section J, Attachment B, Reporting Requirements. Items such as scientific and technical reports, journal article reprints, conference papers and proceedings, theses, translations, etc. when submitted as part of the Technical Report Deliverable shall be submitted in accordance with the instructions in Part III - Section J, Attachment B, Reporting Requirements. Send both the diskette and hard copy of the report as one submission to the following address:

AAD Document Control  
U.S. Department of Energy  
Federal Energy Technology Center  
P. O. Box 10940, MS 921-143  
Pittsburgh, PA 15236-0940

## SECTION D - PACKAGING AND MARKING

### D.1 PACKAGING

Preservation, packaging, and packing for shipment or mailing of all work delivered hereunder shall be in accordance with good commercial practice and adequate to insure acceptance by common carrier and safe transportation at the most economical rate(s).

### D.2 MARKING

All correspondence will reference the contract number [TBD].

All reports shall be marked in accordance with the "Reporting Requirements Checklist (DOE F 1332.1)," Part III, Section J, Attachment B.

## SECTION E - INSPECTION AND ACCEPTANCE

### E.1 INSPECTION

Inspection of all items under this contract shall be accomplished by the DOE Contracting Officer's Representative (see PART I - SECTION G), or any other duly authorized Government representative.

### E.2 INSPECTION OF RESEARCH AND DEVELOPMENT (SHORT FORM) (52.246-9) (APR 1984)

The Government has the right to inspect and evaluate the work performed or being performed under the contract, and the premises where the work is being performed, at all reasonable times and in a manner that will not unduly delay the work. If the Government performs inspection or evaluation on the premises of the Contractor or a subcontractor, the Contractor shall furnish and shall require subcontractors to furnish all reasonable facilities and assistance for the safe and convenient performance of these duties.

### E.3 ACCEPTANCE

Acceptance of all work and effort under this contract shall be accomplished by the Contracting Officer.

## SECTION F - DELIVERIES OR PERFORMANCE

### F.1 COMPLETION DATES

The work to be performed hereunder shall commence on the effective date of the contract (see Part I, Section A, Block 20C.) and shall continue for [TBD]. This includes time for submission of the draft final report, review of the draft by DOE, and submission of the approved final report by the Contractor.

### F.2 PRINCIPAL LOCATION(S) OF PERFORMANCE

The principal location of performance under this contract shall be at the Contractor's facility located in [TBD].



## SECTION G - CONTRACT ADMINISTRATION

### G.1 CORRESPONDENCE PROCEDURES

To promote timely and effective administration, correspondence (except for invoices and reports) submitted under this contract shall be subject to the following procedures:

- (a) Technical Correspondence. Technical correspondence (as used herein, this term excludes technical correspondence where patent or technical data issues are involved and correspondence which proposes or otherwise involves waivers, deviations, or modifications to the requirements, terms, or conditions, of this contract) shall be addressed to the DOE Contracting Officer's Representative, with an information copy of the correspondence to the DOE Contract Specialist.
- (b) Property Correspondence. Property correspondence (as used herein, this term includes correspondence which addresses matters which relate to property issues which come under the contract's Government property provisions) shall be addressed to the DOE Property Administrator, with information copies of the correspondence to the DOE Contracting Officer's Representative and the DOE Contract Specialist.
- (c) Indirect Rate Correspondence. All correspondence relating to the establishment, revision, and negotiation of billing and final indirect cost rates shall be addressed to the Contracting Officer for Indirect Cost Rate Management (see Clause G.6), with information copies of the correspondence to the DOE Contract Specialist.
- (d) Other Correspondence. All other correspondence shall be addressed to the Contract Specialist, with information copies of the correspondence to the DOE Contracting Officer's Representative, the DOE Intellectual Property Counsel (where patent or technical data issues are involved), and the DOE Property Administrator (where Government Property issues are involved).
- (e) Contract Specialist's Address. The Contract Specialist's address and telephone number are as follows:

U.S. Department of Energy  
Federal Energy Technology Center  
[TBD]  
[TBD]  
ATTN: [TBD], Contract Specialist  
Telephone: [TBD]  
FAX: [TBD]  
INTERNET: [NAME]@fetc.doe.gov
- (f) Subject Line(s). All correspondence shall contain a subject line commencing with the contract number, as illustrated below:

SUBJECT: Contract No. DE-AC26-[TBD]  
(Request should identify specific contract action.)

G.2 DOE CONTRACT SPECIALIST FOR POST-AWARD ADMINISTRATION

The DOE Contract Specialist is designated in paragraph G.1(e), above. The Contractor shall use the Contract Specialist as the point of contact on all but technical, property, and indirect cost rate matters (see G.1(a), G.1(b), and G.1(c), above, for definitions).

G.3 DOE CONTRACTING OFFICER'S REPRESENTATIVE (COR) FOR POST-AWARD ADMINISTRATION

The DOE Contracting Officer's Representative's address and telephone number are provided below. The Contractor shall use the DOE Contracting Officer's Representative as the point of contact on technical matters (see G.1(a) and H.3).

U. S. Department of Energy  
Federal Energy Technology Center  
[TBD ]  
ATTN: [TBD], Contracting Officer's Representative  
Telephone: [TBD]  
FAX: [TBD]  
INTERNET: [TBD]@fetc.doe.gov

G.4 DOE PROPERTY ADMINISTRATOR FOR POST AWARD ADMINISTRATION

The DOE Property Administrator, address, and telephone number are provided below. The Contractor shall use the Property Administrator as the point of contact on property matters (see G.1(b), above, for definition).

U. S. Department of Energy  
Federal Energy Technology Center  
[TBD]  
ATTN: [TBD], Property Administrator  
Telephone: [TBD]  
FAX: [TBD]  
INTERNET: [TBD]@fetc.doe.gov

G.5 DOE INTELLECTUAL PROPERTY COUNSEL

The mailing address for information copies to the DOE Intellectual Property Counsel is:

U.S. Department of Energy  
Office of Intellectual Property Law  
Chicago Operations Office  
9800 South Cass Avenue  
Argonne, IL 60439

G.6 CONTRACTING OFFICER FOR INDIRECT COST RATE MANAGEMENT

The Contracting Officer for Indirect Cost Rate Management, address, and telephone number are provided below. The Contractor shall use this individual as the point of contact for all matters regarding billing and final indirect cost rates.

U.S. Department of Energy  
Federal Energy Technology Center  
[TBD]  
ATTN: [TBD], Contracting Officer for Indirect Rates  
Telephone: [TBD]  
FAX: [TBD]  
INTERNET: [TBD]@fetc.doe.gov

G.7 BILLING INSTRUCTIONS - COST-TYPE CONTRACT

The Contractor, in accordance with the Billing Instructions identified in Part III, Section J, Attachment C and other applicable provisions of this contract, shall submit the original signed voucher (supported by the Statement of Cost) to:

U.S. Department of Energy  
Oak Ridge Financial Service Center  
P.O. Box 4967  
Oak Ridge, TN 37831  
Phone: 423/576-1651 or 1-888/251-3557

In addition, two copies of the signed voucher (each supported by a copy of the Statement of Cost) shall be submitted to:

Commercial Payments  
U.S. Department of Energy  
Federal Energy Technology Center  
P.O. Box 10940, MS 921-143  
Pittsburgh, PA 15236-0940

In accordance with the Prompt Payment Act, all invoices submitted shall include the following information:

1. Name of contractor/vendor and invoice date.
2. Contract Number, or other authorization for delivery of property or services.
3. Description, price and quantity of property and services actually delivered or rendered.
4. Shipping and payment terms.
5. Other substantiating documentation or information as required by the contract.
6. Name (where practicable), title, phone number and complete mailing address of responsible official to whom payment is to be sent.
7. Each invoice must be submitted with a Standard Form 1034 as its cover sheet. The SF 1034 must be supported by a Statement of Cost and adequate supporting documentation for each direct cost element for which reimbursement is requested.

8. Any cost sharing or in-kind contributions incurred by the Contractor and/or third party during the billing period must be included in the invoiced amount and adequately supported.

Invoices that are determined to be defective under the above criteria, and therefore not suitable for payment, shall be returned to the Contractor as soon as practicable, specifying the reasons why the invoice is not proper.

#### G.8 DEFECTIVE OR IMPROPER INVOICES

Name (where practicable), title, phone number, office name, and complete mailing address of officials of the business concern to be notified when the Government receives a defective or improper invoice.

[TBD - data to be provided by successful offeror prior to award]

#### G.9 NOTICE OF INVOICE PROCESSING BY SUPPORT CONTRACTOR

A Small Business Administration, 8(a) support service contractor performs the function of processing of all invoices submitted to the Federal Energy Technology Center [Pittsburgh Office] against its awards. Therefore, this contractor has access to your business confidential cost/rate information. A special provision in this contractor's award requires the confidential treatment by all contractor employees of any and all business confidential information of other contractors and financial assistance recipients to which they have access. The contract employees sign non-disclosure agreements and the contractor is legally responsible for any actions arising as a result of disclosure of confidential information by its employees.

#### G.10 INDIRECT RATES - BILLING

In accordance with the terms of this contract, indirect costs (i.e. fringe benefits, overhead, and general & administrative expenses) are to be reimbursed on the basis of billing rates approved by the Contracting Officer, pending establishment of final indirect cost rates. The commercial payments system utilized to process invoices maintains the approved billing rates and compares the approved rates to those invoiced. An invoice which does not utilize the approved billing rates will be flagged by the system and payment will be delayed pending resolution.

#### G.11 INDIRECT RATES - FINAL

The "Allowable Cost and Payment" clause, FAR 52.216-7, contained in this contract (Part II, Section I) requires the Contractor to submit its final indirect cost rates within ninety (90) calendar days after the expiration of each of its fiscal years to the Contracting Officer responsible for negotiating the final indirect cost rates. If the Contracting Officer for Indirect Cost Rate Management (as identified in Clause G.6) is responsible to negotiate final rates with the Contractor, then the incurred cost submission for each fiscal year should be submitted to his address.

## SECTION H - SPECIAL PROVISIONS

### H.1 TRAVEL AND PER DIEM COSTS

Costs incurred by contractor personnel for travel, including costs of lodging, other subsistence, and incidental expenses, shall be considered to be reasonable and allowable only to the extent that they do not exceed the rates and amounts set by Subchapter I of Chapter 57 of Title 5, United States Code, or by the Administrator of General Services or the President (or his designee) pursuant to any revision of such subchapter; and are allowable pursuant to the "Allowable Cost and Payment" clause, FAR 52.216-7, contained in this contract (Part II, Section I).

Foreign travel shall be subject to DEAR 952.247-70 (PART II, Section I).

### H.2 LIMITATION OF FUNDS (FAR 52.232-22, APR 1984)

Pursuant to the clause entitled "Limitation of Funds," total funds in the amount of \$ [TBD] are obligated herewith and made available for payment of allowable costs to be incurred from the effective date of this contract through the period estimated to end [TBD].

### H.3 TECHNICAL DIRECTION

- (a) Performance of the work under this contract shall be subject to the technical direction of DOE Contracting Officer's Representative identified elsewhere in this contract. The term "technical direction" is defined to include, without limitation:
  - (1) Directions to the Contractor which redirect the contract effort, shift work emphasis between work areas or tasks, require pursuit of certain lines of inquiry, fill in details or otherwise serve to accomplish contractual Statement of Work.
  - (2) Provision of written information to the Contractor which assists in the interpretation of drawings, specifications or technical portions of the work description.
  - (3) Review, and where required by the contract, approval of technical reports, drawings, specifications and technical information to be delivered by the Contractor to the Government under the contract.
- (b) Technical direction must be within the scope of work stated in the contract. The DOE Contracting Officer's Representative does not have the authority to, and may not, issue any technical direction which:
  - (1) Constitutes an assignment of additional work outside the Statement of Work;
  - (2) Constitutes a change as defined in the contract clause entitled "Changes";
  - (3) In any manner causes an increase or decrease in the total estimated contract cost, or the time required for contract performance;

- (4) Changes any of the expressed terms, conditions or specifications of the contract; or
  - (5) Interferes with the Contractor's right to perform the terms and conditions of the contract.
- (c) All technical directions shall be issued in writing by the DOE Contracting Officer's Representative.
- (d) The Contractor shall proceed promptly with the performance of technical directions duly issued by the DOE Contracting Officer's Representative in the manner prescribed by this article and within his authority under the provisions of this article. If, in the opinion of the Contractor, any instruction or direction by the DOE Contracting Officer's Representative falls within one of the categories defined in (b)(1) through (5) above, the Contractor shall not proceed but shall notify the Contracting Officer in writing within five (5) working days after receipt of any such instruction or direction and shall request the Contracting Officer to modify the contract accordingly. Upon receiving the notification from the Contractor, the Contracting Officer shall:
  - (1) Advise the Contractor in writing within thirty (30) days after receipt of the Contractor's letter that the technical direction is within the scope of the contract effort and does not constitute a change under the "Changes" clause of the contract;
  - (2) Inform the Contractor in writing within thirty (30) days after receipt of the Contractor's letter not to perform under the direction and to cancel the direction; or
  - (3) Advise the Contractor within a reasonable time that the Government will issue a written change order.
- (e) A failure of the Contractor and Contracting Officer to agree that the technical direction is within the scope of the contract, or a failure to agree upon the contract action to be taken with respect thereto shall be subject to the provisions of FAR 52.233-1, "Disputes," of the Contract Clauses (PART II-SECTION I).

#### H.4 MODIFICATION AUTHORITY

Notwithstanding any of the other provisions of this contract, the Contracting Officer shall be the only individual authorized to:

- (a) accept nonconforming work,
- (b) waive any requirement of this contract, or
- (c) modify any term or condition of this contract.

#### H.5 GOVERNMENT PROPERTY AND DATA

- (a) Except as otherwise authorized by the Contracting Officer in writing, the Contractor is not authorized to acquire as a direct charge item under this contract any equipment (including office equipment), furniture, fixtures or other personal property items.

(b) Acquisition Authorization Requirements

- (1) In the course of performance of this contract, the Contractor may only acquire and direct charge to this contract such equipment (including office equipment), furniture, or other personal property items as have been specifically authorized by the Contracting Officer by inclusion of such items on the "List of Government Property -- Contractor Acquired" (Part III -- Section J, Attachment D) to this contract.
- (2) The Contractor may request authorization for acquisition of additional items from the Contracting Officer. Any such request shall include an analysis of the most economical method of acquisition (e.g., lease versus purchase) and shall describe the material equity arising from any proposed lease arrangement, such as option credits.
- (3) Any changes in the acquisition authorization shall be reflected in a modification to this contract which revises the "List of Government Property -- Contractor Acquired" (Part III -- Section J, Attachment D) to this contract.
- (4) Authorization to acquire does not constitute consent to the placement of a subcontract.

(c) Government-Furnished Property and Data

Except as otherwise authorized by the Contracting Officer in writing, only that property and data specifically included in the "List of Government-Furnished Property" (Part III, Section J, Attachment E) to the contract, shall be furnished.

(d) Reporting Requirements

- (1) The reports required shall be submitted on DOE form 4300.3 provided by DOE in accordance with 48 CFR 945 and the form's instructions (Part III, Section J, Attachment B).
- (2) The reports are to include all capital equipment and sensitive items acquired or furnished under this contract, whether or not listed on the attachments referenced above.

H.6 KEY PERSONNEL

Key personnel under this contract, for the purpose of administering DEAR 952.235-70, found at Section I, are:

[TBD]

The above-referenced clause, contains a requirement for notification to the Contracting Officer reasonably in advance of diverting of, or substitution for, any of these individuals. That period of time shall be within thirty (30) calendar days.

## H.7 SUBCONTRACTS

Prior to the placement of subcontracts, the Contractor shall insure that:

- (a) they contain all of the clauses of this contract (altered when necessary for proper identification of the contracting parties) which contain a requirement for such inclusion in applicable subcontracts;
- (b) any applicable subcontractor Certificate of Current Cost or Pricing Data (see FAR 15.804-4) and subcontractor Representations and Certifications; and
- (c) any required prior notice and description of the subcontract is given to the Contracting Officer and any required consent is received (see Part II, Section I, FAR 52.244-2, "Subcontracts Under Cost-Reimbursement and Letter Contracts").

Except as may be expressly set forth therein, any consent by the Contracting Officer to the placement of subcontracts shall not be construed to constitute approval of the subcontractor or any subcontract terms or conditions, determination of the allowability of any cost, revision of this contract or any of the respective obligations of the parties thereunder, or creation of any subcontractor privity of contract with the Government.

- (d) The Contractor is hereby given conditional consent to the placement of the following contracts with the following subcontractors:

[TBD]

Notwithstanding this consent, the Contractor shall ensure compliance with Paragraphs (a), (b) and (c) above. Also, since these subcontractors have as a purpose the conduct of research, development and demonstration work, they must additionally contain all applicable Patent and Data clauses contained in Part II, Section I.

## H.8 CONTRACTOR'S PROGRAM MANAGER

The Contractor shall designate a Program Manager who will be the Contractor's authorized supervisor for technical and administrative performance of all work hereunder. The Program Manager shall provide the single point of contact between the Contractor and the Government's Contracting Officer's Representative under this contract. All administrative support for technical personnel required to fulfill the work stated in the contract shall be the responsibility of the Contractor.

The Program Manager shall receive and execute, on behalf of the Contractor, such technical directions as the DOE Contracting Officer's Representative may issue within the terms and conditions of the contract.

## H.9 RESERVED

## H.10 REPRESENTATIONS AND CERTIFICATIONS

The "Representations, Certifications and Other Statements of the Offeror," dated [TBD] for this contract are hereby incorporated by reference.



#### H.11 SUBCONTRACTOR FACILITIES CAPITAL COST OF MONEY

- (a) To the extent a subcontractor proposes to recover as an element of proposed cost any Facilities Capital Cost of Money (FCCOM) from a higher tier subcontractor or from the prime contractor, the FCCOM cost principle (FAR 31.205-10) shall apply to subcontracts and new scope modifications issued thereto which are fee bearing cost reimbursement type or negotiated fixed price type.
- (b) To the extent a subcontractor is eligible to recover yet does not propose as an element or proposed cost any Facilities Capital Cost of Money (FCCOM) from a higher tier subcontractor or from the prime contractor, the higher tier subcontractor or the prime contractor shall insert the following provision in any such subcontract or new scope modification issued thereto:

##### Waiver of Facilities Capital Cost of Money (FAR 52.215-31, SEP 1987)

The Contractor did not include facilities capital cost of money as a proposed cost of this contract. Therefore, it is an unallowable cost under this contract.

- (c) The Contractor agrees to insert the substance of this clause, including this paragraph (c) altered as necessary for proper identification of the parties, in any subcontract placed hereunder which is a fee bearing cost reimbursement or negotiated fixed price type.

#### H.12 COMPLIANCE WITH APPLICABLE FEDERAL, STATE, AND LOCAL REQUIREMENTS

In performing work under this contract, the Contractor shall comply with all relevant federal, state, and local statutes, ordinances, laws, and regulations.

#### H.13 NOTIFICATION OF ENVIRONMENT, SAFETY AND HEALTH VIOLATIONS

Any written Notice of Violation of any of the below listed federal Environment, Safety and Health statutes (or any state, county or municipal law deriving from such federal statute) arising from the performance of this contract, that is received by the Contractor from any federal, state, county or municipal authority shall be immediately communicated to the Government Contracting Officer Representative identified under Part I, Section G.3. Such communication shall be by telephone and shall occur not later than twenty-four (24) hours following the date of written Notice of Violation.

The telephone communication shall be followed by a written report to the Government Contracting Officer Representative identified under Part I, Section G.3., to be delivered in an original and two (2) copies not later than ten (10) calendar days following the date of written Notice of Violation. Such written report shall include a conformed copy of the Notice of Violation, an analysis of the pertinent facts giving rise to the violation, and a schedule of the remedial events and time periods necessary to bring the contractor into compliance with the violated statute and/or regulation.

Environment, Safety and Health Statutes

The Clean Air Act

The Clean Water Act

The Resource Conservation and Recovery Act

The Comprehensive Environmental Response, Compensation, and Liability Act

The Toxic Substance Control Act

The Safe Drinking Water Act

H.14 NOTIFICATION OF SPILL OR UNREGULATED RELEASE

Any accidental spill or release which is in violation of any of the below listed federal Environment, Safety and Health statutes (or any state, county or municipal law deriving from such federal statute) arising from the performance of this contract shall upon its being reported to the proper federal, state, county or municipal authority also be immediately communicated to the Government Contracting Officer Representative identified under Part I, Section G.3. Such communication shall be by telephone and shall occur not later than twenty-four (24) hours following the date of the incident being reported.

The telephone communication shall be followed by a written report to the Government Contracting Officer Representative identified under Part I, Section G.3, to be delivered in an original and two (2) copies not later than ten (10) calendar days following the date of the incident being reported. Such written report shall include an analysis of the pertinent facts giving rise to the violation, and a schedule of the remedial events and the time periods necessary to bring the contractor into compliance with the violated statute and/or regulation.

Environment, Safety and Health Statutes

The Clean Air Act

The Clean Water Act

The Resource Conservation and Recovery Act

The Comprehensive Environmental Response, Compensation, and Liability Act

The Toxic Substance Control Act

The Safe Drinking Water Act

H.15 NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) -- PRIOR APPROVALS

The National Environmental Policy Act of 1969 (NEPA) requires that all federal agencies consider the impacts of their projects on the human environment. As part of the DOE's NEPA requirements, the awardee shall be required to supply to the DOE certain environmental information. DOE funds may not be expended on [TBD] until the DOE notifies the awardee that all NEPA requirements have been satisfied. The awardee however, may expend its funds on these activities at its own risk.

H.16 TOXIC CHEMICAL RELEASE INVENTORY

As part of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act, facilities are required to submit a Toxic Chemical Release Inventory (Form R) to report to the U.S. Environmental Protection Agency the release of toxic chemicals. Copies of this form will be made available to all contractors/grantees requesting from their respective Contract Specialist.

Contractors/grantees are only required to submit this form if the facility in which they are working manufactures 25,000 lbs. Per year, or uses 10,000 lbs. per year of a toxic chemical/compound listed in 40 CFR 372 Subpart D - Specifice Toxic Chemical Listings.

Questions regarding the form can be addressed to: EPRCA Reporting Center, P.O. Box 3340, Merrifield, VA 22116-3348, Attn: Toxic Chemical Release Inventory.

PART II  
SECTION I  
CONTRACT CLAUSES

<u>FAR</u>	<u>TITLE</u>	<u>DATE</u>
I.1 52.252-2	CLAUSES INCORPORATED BY REFERENCE.	JUN 1988
This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make its full text available (See "NOTE" at end of this section).		
I.2 52.202-1	DEFINITIONS	OCT 1995
I.3 52.203-3	GRATUITIES	APR 1984
I.4 52.203-5	COVENANT AGAINST CONTINGENT FEES	APR 1984
I.5 52.203-7	ANTI-KICKBACK PROCEDURES	JUL 1995
I.6 52.203-8	CANCELLATION, RESCISSION, AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY	JAN 1997
I.7 52.203-10	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY	JAN 1997
I.8 52.203-12	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS	JAN 1990
I.9 52.204-4	PRINTING/COPYING DOUBLE-SIDED ON RECYCLED PAPER	JUN 1996
I.10 52.209-6	PROTECTING THE GOVERNMENTS INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT	JUL 1995
I.11 52.215-2	AUDIT AND RECORDS--NEGOTIATION	AUG 1996
I.12 52.215-2	AUDIT AND RECORDS--NEGOTIATION (AUG 1996) -- ALTERNATE II	JAN 1997
I.13 52.215-22	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA	OCT 1995
I.14 52.215-23	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA-MODIFICATIONS	OCT 1995
I.15 52.215-24	SUBCONTRACTOR COST OR PRICING DATA	OCT 1995
I.16 52.215-25	SUBCONTRACTOR COST OR PRICING DATA - MODIFICATIONS	OCT 1995
I.17 52.215-26	INTEGRITY OF UNIT PRICES	JAN 1997
I.18 52.215-27	TERMINATION OF DEFINED BENEFIT PENSION PLANS	MAR 1996
I.19 52.215-31	WAIVER OF FACILITIES CAPITAL COST OF MONEY.	SEP 1987
I.20 52.215-33	ORDER OF PRECEDENCE	JAN 1986
I.21 52.215-39	REVERSION OR ADJUSTMENT OF PLANS FOR POST-RETIREMENT BENEFITS OTHER THAN PENSIONS (PRB)	MAR 1996
I.22 52.215-40	NOTIFICATION OF OWNERSHIP CHANGES	FEB 1995
I.23 52.216-7	ALLOWABLE COST AND PAYMENT	MAR 1997
I.24 52.216-12	COST-SHARING CONTRACT - NO FEE	APR 1984
I.25 52.216-15	PREDETERMINED INDIRECT COST RATES	AUG 1996
I.26 52.219-8	UTILIZATION OF SMALL, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS CONCERNS	OCT 1995

I.27 52.219-9	SMALL BUSINESS, SMALL DISADVANTAGED AND WOMEN-OWNED SMALL BUSINESS SUBCONTRACTING PLAN.	AUG 1996
I.28 52.219-16	LIQUIDATED DAMAGES-SUBCONTRACTING PLAN	OCT 1995
I.29 52.222-1	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES	FEB 1997
I.30 52.222-2	PAYMENT FOR OVERTIME PREMIUMS	JUL 1990
I.31 52.222-3	CONVICT LABOR	AUG 1996
I.32 52.222-4	CONTRACT WORK HOURS AND SAFETY STANDARDS ACT - OVERTIME COMPENSATION	JUL 1995
I.33 52.222-26	EQUAL OPPORTUNITY	APR 1984
I.34 52.222-35	AFFIRMATIVE ACTION FOR SPECIAL DISABLED AND VIETNAM ERA VETERANS	APR 1984
I.35 52.222-36	AFFIRMATIVE ACTION FOR HANDICAPPED WORKERS	APR 1984
I.36 52.222-37	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS AND VETERANS OF THE VIETNAM ERA	JAN 1988
I.37 52.223-2	CLEAN AIR AND WATER	APR 1984
I.38 52.223-6	DRUG-FREE WORKPLACE	JAN 1997
I.39 52.223-14	TOXIC CHEMICAL RELEASE REPORTING	OCT 1996
I.40 52.225-11	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES	OCT 1996
I.41 52.227-1	AUTHORIZATION AND CONSENT (JUL 1995) -- ALTERNATE I	JUL 1995
I.42 52.227-2	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT	AUG 1996
I.43 52.227-11	PATENT RIGHTS-RETENTION BY THE CONTRACTOR (SHORT FORM) JUN 1989-- JUN 1989 -- ALTERNATE III	JUN 1989
I.45 52.227-14	RIGHTS IN DATA - GENERAL	JUN 1987
I.46 52.227-14	RIGHTS IN DATA - GENERAL (JUN 1987) -- ALTERNATE I	JUN 1987
I.47 52.227-14	RIGHTS IN DATA - GENERAL (JUN 1987) -- ALTERNATE II	JUN 1987
I.48 52.227-14	RIGHTS IN DATA - GENERAL (JUN 1987) -- ALTERNATE V	JUN 1987
I.49 52.227-16	ADDITIONAL DATA REQUIREMENTS	JUN 1987
I.50 52.227-23	RIGHTS TO PROPOSAL DATA (TECHNICAL)	JUN 1987
I.51 52.230-2	COST ACCOUNTING STANDARDS (CAS)	APR 1996
I.52 52.230-3	DISCLOSURE AND CONSISTENCY OF COST ACCOUNTING PRACTICES	APR 1996
I.53 52.230-6	ADMINISTRATION OF COST ACCOUNTING STANDARDS	APR 1996
I.54 52.230-5	COST ACCOUNTING STANDARDS--EDUCATIONAL INSTITUTION	APR 1996
I.55 52.232-17	INTEREST	JUN 1996
I.56 52.232-20	LIMITATION OF COST	APR 1984
I.57 52.232-22	LIMITATION OF FUNDS	APR 1984
I.58 52.232-23	ASSIGNMENT OF CLAIMS	JAN 1986
I.59 52.232-25	PROMPT PAYMENT	MAY 1997
I.60 52.232-33	MANDATORY INFORMATION FOR ELECTRONIC FUNDS TRANSFER PAYMENT	AUG 1996
I.61 52.233-1	DISPUTES	OCT 1995
I.62 52.233-1	ALTERNATE I	DEC 1991

I.63 52.233-3	PROTEST AFTER AWARD	AUG 1996
	ALTERNATE I	JUN 1985
I.64 52.242-1	NOTICE OF INTENT TO DISALLOW COSTS	APR 1984
I.65 52.242-3	PENALTIES FOR UNALLOWABLE COSTS	OCT 1995
I.66 52.242-4	CERTIFICATION OF FINAL INDIRECT COSTS	JAN 1997
I.67 52.242-13	BANKRUPTCY	JUL 1995
I.68 52.243-2	CHANGES - COST-REIMBURSEMENT (AUG 1987)	
	-- ALTERNATE V	APR 1984
I.69 52.244-2	SUBCONTRACTS (COST-REIMBURSEMENT AND LETTER CONTRACTS)	FEB 1997
I.70 52.244-5	COMPETITION IN SUBCONTRACTING	DEC 1996
I.71 52.245-5	GOVERNMENT PROPERTY (COST-REIMBURSEMENT, TIME-AND-MATERIAL AND LABOR-HOUR CONTRACTS)(JAN 1986)	
	-- ALTERNATE I	JAN 1985
I.72 52.245-18	SPECIAL TEST EQUIPMENT	AUG 1988
I.73 52.247-63	PREFERENCE FOR U.S.-FLAG AIR CARRIERS	JAN 1997
I.74 52.249-5	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (EDUCATIONAL AND OTHER NONPROFIT INSTITUTIONS)	SEP 1996
I.75 52.249-6	TERMINATION (COST-REIMBURSEMENT)	SEP 1996
I.76 52.249-14	EXCUSABLE DELAYS	APR 1984
I.77 52.253-1	COMPUTER GENERATED FORMS	JAN 1991
I.78 52.215-42	REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA--MODIFICATIONS	JAN 1997
I.79 52.244-6	SUBCONTRACTS FOR COMMERCIAL ITEMS AND COMMERCIAL COMPONENTS	OCT 1995
I.80 52.252-4	ALTERATIONS IN CONTRACT	APR 1984
I.81 52.242-15	STOP WORK ORDER (AUG 1989) -- ALTERNATE 1	AUG 1984
I.82 52.228-7	INSURANCE - LIABILITY TO THIRD PARTY	MAR 1996
I.83 52.227-14	RIGHTS IN DATA - GENERAL (JUN 1987)	
	-- ALTERNATE IV	JUN 1987
<u>DEAR #</u>	<u>TITLE</u>	<u>DATE</u>
I.84 952.202-1	DEFINITIONS	MAR 1985
I.85 952.208-70	PRINTING	APR 1984
I.86 952.227-9	REFUND OF ROYALTIES	FEB 1995
I.87 952.227-11	PATENT RIGHTS--RETENTION BY THE CONTRACTOR (SHORT FORM)	FEB 1995
I.88 952.227-13	PATENT RIGHTS--ACQUISITION BY THE GOVERNMENT	FEB 1995
I.89 952.227-73	ADDITIONAL TECHNICAL DATA REQUIREMENTS	APR 1984
I.90 952.227-75	RIGHTS IN TECHNICAL DATA -- LONG FORM	APR 1984
I.91 952.227-77	RIGHTS IN TECHNICAL DATA -- SHORT FORM	APR 1984
I.92 952.227-82	RIGHTS TO PROPOSAL DATA	APR 1984
I.93 952.227-84	NOTICE OF RIGHT TO REQUEST PATENT WAIVER	APR 1984
I.94 952.235-70	KEY PERSONNEL	APR 1995
I.95 952-245-5	GOVERNMENT PROPERTY--COST REIMBURSEMENT, TIME AND MATERIAL, OR LABOR-HOUR CONTRACTS	JAN 1986
I.96 952.247-70	FOREIGN TRAVEL	APR 1984
I.97 952.251-70	CONTRACTOR EMPLOYEE TRAVEL DISCOUNTS	JUN 1995

I.98	952.216-7	ALLOWABLE COST AND PAYMENT -- ALTERNATE I OR II	
I.99	952.226-70	SUBCONTRACTING GOALS UNDER SECTION 3021(A) OF THE ENERGY POLICY ACT OF 1992 (PUB.L. 102-486)	JUN 1996
I.100	952.226-71	UTILIZATION OF ENERGY POLICY ACT TARGET ENTITIES	JUN 1996
I.101	952.226-72	ENERGY POLICY ACT SUBCONTRACTING GOALS AND REPORTING REQUIREMENTS	JUN 1996

NOTE: An "electronic version" of the Federal Acquisition Regulations (FAR) and Department of Energy Acquisition Regulations (DEAR) can be found at the following internet sites:

FAR:

<http://farsite.hill.af.mil/VFFAR1.HTM>

(a quick reference to the FAR parts, maintained by the General Services Administration)

[http://www.gsa.gov/far/pdf\\_home.html](http://www.gsa.gov/far/pdf_home.html)

DEAR:

<http://farsite.hill.af.mil/vvfdoe1.htm>

(a quick reference to the DEAR parts, maintained by the General Services Administration)

<http://www.pr.doe.gov/dear.html>

PART III - SECTION J

LIST OF ATTACHMENTS

<u>Attachment</u>	<u>Title</u>	<u>Page #</u>
A	Objectives, Background and Program Areas of Interest *	A1-A9
B	Reporting Requirements	B1-B27
C	Billing Instructions	C1-C5
D	List of Government Property - Contractor Acquired	D1
E	List of Government-Furnished Property	E1
F	Subcontract Plan **	F1

\* Program Areas of Interest are relevant only to the solicitation. Attachment A will be replaced with the contract Statement of Work prior to contract award.

\*\* A "Subcontract Plan" may be required prior to award being made, in accordance with Part III, Section I, FAR 52.219-9, Small Business, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan.



## PART III - SECTION J

### ATTACHMENT A

#### OBJECTIVES, BACKGROUND and PROGRAM AREA OF INTEREST

#### PROGRAM RESEARCH AND DEVELOPMENT ANNOUNCEMENT "FUNDAMENTAL GEOSCIENCE FOR RESERVOIR CHARACTERIZATION" PRDA NO. DE-RA26-97BC15029

#### 1.0 DEPARTMENTAL OBJECTIVES

#### 1.1 INTRODUCTION

The Department of Energy's (DOE), National Petroleum Technology Office (NPTO) seeks proposals that contain aspects of fundamental and applied research which integrate advanced geoscience and reservoir engineering concepts. The focus is to quantify reservoir architecture, dynamics of fluid-rock and fluid-fluid interactions related to lithologic characterization, and impacts on producibility. Research methods will require the acquisition and integration of characterization data from wide variety of scales and the quantitative development of interrelationships based on scale definition as it relates to oil reservoirs. An interdisciplinary effort should focus on increasing well-to-well predictability for improving recovery efficiency from geologic formations containing known oil reservoirs, incorporating data from outcrop (mesoscopic) to core and pore (microscopic) scales. Industrial involvement, including cost-participation and/or other leveraging is required. Application of ongoing research solicited by this PRDA shall be transferred to petroleum producers (majors and independents), consultants, and service companies through an aggressive technology transfer effort.

#### 1.2 BACKGROUND

The primary mission of the DOE Fossil Energy (FE) program is to conduct coal, oil, gas, oil shale and tar sands research and development programs for the Department of Energy (DOE). The purpose is to expand the knowledge base through which industry can bring additional fossil energy resources and new technology options into the marketplace in a cost-effective, environmentally acceptable manner.

The Reservoir Characterization area, under the Advanced Diagnostics and Imaging Systems Program is an integral part of the DOE/FE mission and strategy. The Advanced Diagnostics and Imaging Systems Program is directed

toward cross-cutting geoscience and engineering research to develop advanced and innovative technologies for the additional recovery of some of the estimated 350 billion barrels of “discovered but unrecovered” oil identified in existing fields (USGS,1995). Knowledge gained from this PRDA may also be applied toward the recovery of the estimated 300 billion barrels of oil equivalent classified as undiscovered technically recoverable conventional resources, growth of reserves in known fields and technically recoverable resources in unconventional accumulations (USGS, 1995, p2).

U.S. crude oil demand has increased to where 53 percent of the Nation's needs are now met through imports. Correlatively, domestic crude oil production continues to decline, to where it is projected that 64 percent of US demand will be met through imports by 2015 (EIA, 1997). Domestic exploration, particularly offshore, is expected to increase oil reserves; however, it is not expected to match production demands, thus assuring a continuing need to meet the short-fall through imports. Approximately two-thirds of the oil discovered in the U.S. will remain in the ground after primary, secondary and tertiary recovery operations. Increasing the recovery efficiencies of these operations will have a significant impact on domestic productivity, resulting in economic advantages to the American people.

Low recovery efficiencies are in part due to the lack of effective quantification and integration of: (1) Geologic, geophysical and engineering parameters, of widely divergent scales, related to the characterization of reservoir heterogeneities. (2) The temporal and spatial dynamic alterations that occur within the reservoir, the rock-fluid, and the fluid-fluid interactions that occur throughout recovery processes. (3) The temporal and spatial limitations in geophysical technologies, in inversion algorithms at the interwell scale, and the quantification of these data to reservoir and fluid characteristics.

These realizations have prompted an emphasis on integrating advanced geoscience and engineering concepts to quantify the interrelationships of reservoir structure and fluid dynamics as a function of lithologic characterization. Quantifying and integrating geologic and engineering data focused on reservoir characterization are generic activities, in that they are necessary steps for the most effective recovery of oil resources.

Program reviews by broad-based technical advisory groups such as listed below, have recommended additional research to increase the recovery of oil from known reservoirs, with emphasis on geoscience and advanced technologies. This PRDA addresses some of the Advanced Research & Development topics highlighted in these studies. (Copies of the following publications may be obtained through the individual authoring organizations.)

- o The National Research Council, 1987, Future Directions in Advanced Exploratory Research Related to Oil, Gas, Shale, and Tar Sands Resources.
- o Energy Advisory Board, 1987, Geoscience Research for Energy Security.
- o National Petroleum Council, 1987, Factors Affecting U.S. Oil and Gas Outlook.
- o The National Research Council, 1990, Fuels to Drive Our Future.
- o The National Petroleum Council, 1995, Research, Development and Demonstration Needs of the Oil and Gas Industry.
- o Secretary of Energy Advisory Board, 1995, Energy R& D: Shaping our Nation's Future in a Competitive World.
- o The National Petroleum Council, 1995, Future Issues, A View of U.S. Oil & Natural Gas to 2020.
- o The National Research Council, 1996, Rock Fractures and Fluid Flow, Contemporary Understanding and Applications.
- o The National Research Council, 1997, The Dynamics of Sedimentary Basins.

Uncertainty concerning the physical and chemical nature of oil reservoirs is one of the most severe technological barriers to increased economic recovery from domestic reservoirs. Oil reservoirs are composed of a wide variety of architectural heterogeneities (i.e., rock facies, diagenetic alterations, structural/stratigraphic settings). Porosity, permeability, pore structure, fracture patterns, facies geometry, capillary forces, miscibility and saturation variations (i.e., oil-gas-brine compositions, fluid-rock and fluid-fluid interactions) also contribute to technical recovery barriers. Several of these variables often change between like reservoirs within a single "geologic play" and may change at the interwell scale within a specific reservoir. Presently, our ability to quantify these heterogeneities and variables is limited. The effective interdisciplinary integration of various data bases of widely varying scales is a long-sought goal.

Quantitative definition of reservoir heterogeneity is needed through the integration of geologic, geophysical and engineering data into a multidisciplinary understanding of the reservoir architecture and associated fluid-rock and fluid-fluid interactions. The intent is to evolve quantitative reservoir description incorporating outcrop, field, well-to-well, and laboratory core-rock and fluid data

of widely varying scales to allow greater accuracy and confidence during modeling and simulation. Thus gaining greater recovery efficiency from existing reservoirs.

Some elements and features of reservoir description are deterministic; however, others are stochastic in nature. Advanced numerical techniques to define and predict reservoir parameters need to be guided by geologic and engineering principles when relating such aspects as facies distribution, fluid flow and drive mechanisms. Stochastic and quantitative evaluation is needed to objectify uncertainty ranges in rock-fluid property variabilities for subsequent modeling of recovery efficiencies. Methods need development that integrate data at various scales and uncertainty ranges, from several disciplines, to provide quantitative descriptive input for modeling.

The Department of Energy encourages the aggressive transfer of technology developed through DOE funded R&D efforts. Industrial involvement as co-sponsors and co-researchers is favored as a means of encouraging the implementation and transfer of applications resulting from these research efforts. Peer reviewed publication of research results, involvement in technical meetings, national symposia and regional workshops shall be a part of these research efforts as mechanisms for accelerating technology transfer throughout the term of the contract.

## 2.0 PRDA OBJECTIVE

The objective of this Reservoir Characterization PRDA is to support research designed to foster interdisciplinary coordination of advanced geoscience and engineering concepts. Quantifying the interrelationships of reservoir architecture, fluid-rock and fluid-fluid interactions to lithologic characterization is the focus of the PRDA. The proposed activities may have components of basic research; however, the major thrust of this PRDA is the application of an interdisciplinary approach directed toward the characterization of oil reservoirs. Research efforts targeting geologic formation(s) known to contain oil reservoirs within U.S. basins will encourage rapid dissemination of knowledge and technology to producers. This research supplements and complements, but does not duplicate or displace, private or other public R & D efforts. This solicitation does not seek proposals which either duplicate current research efforts or offer only minor improvements in reservoir lithologic characterization. The results of these research and technology developments shall be available to the public and private industry allowing informed decisions related to cost-effective reservoir management and exploitation of like oil reservoirs within the productive formations studied.

### 3.0 PROGRAM AREA OF INTEREST

Research shall integrate advanced geoscience and reservoir engineering concepts and technologies. The proposed research efforts shall strive to quantify reservoir architecture and the dynamics of fluid-rock and fluid-fluid interactions related to lithologic characterization. The interdisciplinary effort should focus on increasing well-to-well scale predictability for the improvement of recovery efficiency of resources from geologic formations containing known oil reservoirs.

The area of program interest for this PRDA is to provide an understanding and integration of a variety of data types at various scales, with the goal of quantifying reservoir heterogeneities. The purpose is the optimization of recovery efficiencies from oil reservoirs in a cost-effective and environmentally acceptable manner.

Lithologic characterization includes the detection, prediction and quantification of reservoir architecture. The aim is to: (1) characterize and quantify lithologic heterogeneity, (2) quantify these changes mathematically at various scales, (3) integrate the wide variety of data into a model that is jointly constrained by the interdisciplinary interpretive effort, and (4) optimize recovery efficiencies from oil reservoirs in a cost-effective, environmentally acceptable manner.

Reservoir architecture includes spatial and temporal distribution of fluids and fluid types, flow connectivity, as related to pore space distribution, and related chemical, thermal, mechanical and electrical properties. Methods for integrating characterization data at various scales, needs development to provide descriptive input into modeling techniques that allow for these variations. The aim is to develop a quantitative understanding of scale definition as it relates to reservoir structures and how these impact reservoir productivity.

A proposal to DOE under the Advanced Diagnostics and Imaging Systems Program – Reservoir Characterization area shall have sufficient information to allow the DOE to determine that the proposed work represents a sound approach to the investigation of important geoscience and engineering technical issues and is worthy of support under the stated criteria.

Proposed work must be limited principally to advanced technical concepts in coordinated geoscience and engineering research on known oil producing formations and associated reservoirs. Proposals aimed primarily at applying proven concepts to industrial production and marketing should not be submitted because such efforts are considered to be the responsibility of the private sector.

The solicitation is intended to provide a maximum opportunity in structuring the research tasks in a Management Plan and a Statement Of Work (SOW) to suit the subject area and the state of knowledge or development. Where a multi phase research program is envisioned, the proposer must define the various stages in each phase, and the technical criteria for determining successful completion of each stage before advancing to subsequent stages.

The contractor shall perform selected research tasks to achieve, as a minimum, the following results for each project:

1. Development or improvement of laboratory-scale, well-to-well scale, outcrop-scale and/or field- scale experiments/measurements and/or theoretical studies in pertinent areas.
2. Collection and reduction of analytical and/or experimental data from multidisciplinary sources of widely variable scales. Focus is to be on the integration of these sources into an quantitative understanding of reservoir architecture and associated fluid-rock and fluid-fluid interactions for the optimization of oil recovery.
3. Preparation and delivery of technical reports (quarterly, annual, and final) showing the results of the project is required. Project details, including models, associated software programs and applications shall be made available to oil producers, service companies, and other groups or individuals who may have an interest in adapting the technical information. The use of this information is to be applied towards optimizing recovery efficiencies from similar reservoirs with analogous facies within the same oil producing formation(s) studied. Recommendations for further research shall also be documented.

Deliverables from these efforts should be a catalyst for industrial partners to move forward with economically applicable oil recovery efforts within one or more reservoirs associated with the specific geologic formation studied. The deliverables will be a description and results of the proposed activity (method(s), model(s), instrumentation, parameters, databases, etc.). These deliverables will be in the form of a final report and computer programs that are the end products of the activities, and will be made available to the public. Dissemination of information and technology throughout the term of the project is required through an aggressive technology transfer effort, tied in where possible, with ongoing DOE sponsored technology transfer organizations. Attempts should be made through local and regional scientific, engineering, and trade groups to reach many of the producers and service groups that have interests in increasing recovery efficiencies from fields within the formation(s) studied through this project.

The following research activities are representative of those envisioned in this PRDA. Proposals, however, are not limited to these suggested activities, but should include those that the investigator feels are necessary to successfully accomplish a proposed research effort. All proposals must have component(s) that address direct application to increasing recovery efficiencies from known oil reservoirs.

- o Integration of geologic, geophysical and engineering data into an interdisciplinary quantification of reservoir heterogeneity as it relates to production of associated fluids/gases.
- o Integration of well-to-well scale reservoir heterogeneity studies into field and basin wide geologic and engineering framework for optimization of overall oil recovery efficiencies from like reservoirs in specific geologic formations throughout a basin.
- o Development of innovative and quantitative approaches to regional reservoir characterization.
- o Quantification and mapping of reservoir rock facies from surface and subsurface data; integrating geologic, geophysical, hydrologic and engineering data to aid in quantifying reservoir parameters for development of reservoir exploitation models.
- o Development of innovative or advanced techniques for quantitative reservoir heterogeneity description.
- o Development of models to describe and delineate data types required to characterize reservoir heterogeneity.
- o Development of stochastic process-response geologic/engineering models.
- o Documentation of interrelationships of geologic variables to fluid flow (hydrologic aspects) as utilized in process engineering and relate to increasing recovery efficiencies.
- o Development of maps using both geologic and engineering parameters of continuous reservoir equivalent outcrops in known depositional environments. Relate determined heterogeneities to sedimentary and diagenetic processes for predictive purposes.

- o Development of modeling techniques for reservoirs including parameter estimation techniques, reservoir characterization, fluid transport modeling and inverse modeling.
- o Development of models of reservoir in-situ stress relationships to fracturing and related fluid movement dynamics during primary and secondary production history.
- o Development of novel instrumentation and statistical methods applied to pore geometry, rock/fluid interactions and fluid movement as it applies to primary and/or secondary oil recovery efficiency.
- o Documentation through geochemical studies of reservoir rock and included fluids. Relate diagenetic alterations and changes in fluid chemistries to oil recovery efficiencies.
- o Evaluation of formation fluid geochemistry, including naturally occurring isotopes and isotopic ratios within and between hydrocarbon reservoirs to quantify the hydrologic aspects on reservoir producibility.
- o Development of innovative tracer and slug techniques used to quantify hydrologic and reservoir heterogeneities for model refinement related to improving recovery efficiency.
- o Development of new/innovative surface-to-borehole and/or borehole-to-borehole measurement methodologies, to improve well-to-well remote sensing techniques that may be used to quantify reservoir formation properties and associated fluids.
- o Development of instrumentation to improve borehole quantification of reservoir rock and fluid parameters for either open-hole or cased-wells, including horizontal-well logging techniques.
- o Development of new source and sensor technology and inversion methods for obtaining accurate, high-resolution reconstructions of borehole measurements for an improved resolution of reservoir imaging.
- o Improvement of statistical correlations of recovery efficiency and other geostatistical modeling using multi-disciplinary data of varying scales.
- o Development of models for horizontal-well recovery efficiencies in relation to reservoir heterogeneity for fractured reservoirs.



- o Development of innovative/new models for recovery efficiencies, relating reservoir characteristics to fractured reservoirs.
- o Development of basinal analysis including detailed multi-disciplinary studies relating basinal history, timing of hydrocarbon evolution, migration and entrapment. Geologic, geophysical, hydrologic, and engineering based studies should target an oil producing formation(s) that contain a suite of reservoirs within a geologic basin. The goal is to quantify reservoir heterogeneities and controls on producibility which may have wider applicability within the basin.

NOTE: SEE PART V, SECTION L, L.13 FOR INFORMATION ON PREPARING PROPOSALS IN RESPONSE TO THIS SOLICITATION.

DE-RA26-97BC15029

PART III, SECTION J

ATTACHMENT B

REPORTING REQUIREMENTS

NOTICE

The Contractor shall prepare and submit (postage prepaid) the plans and reports indicated in this Attachment. The Contractor shall be responsible for levying appropriate reporting requirements on any Subcontractor in such a manner as to ensure that data submitted by the Subcontractor to the Contractor is compatible with the data elements that the Contractor is responsible for submitting to DOE.

The Contractor should recognize that full and comprehensive compliance of its reporting requirements under this Contract may involve disclosure of proprietary data to the Government for the exercise of the Government's rights in accordance with the "Rights in Technical Data" clause. Recognizing that the Government intends to publish, in whole, certain required reports and other information about the project which is the subject of this Contract while preserving the proprietary data of the Contractor, the Contractor shall submit all deliverables as stand-alone documents which do not contain proprietary data. Whenever, in any deliverable, proprietary data are needed for fullness of reporting, they shall be included in a proprietary appendix. It is the intent of DOE to publish the following, as applicable, reports: Topical Reports; Annual Technical Reports, Quarterly Technical Reports, Semi-Annual Technical Reports and Final Technical Reports.

SUBMIT THE NUMBER OF COPIES AS REQUIRED BY THE REPORTING REQUIREMENTS CHECKLIST TO THE FOLLOWING ADDRESS:

AAD Document Control  
U.S. Department of Energy  
Federal Energy Technology Center  
P.O. Box 10940, MS 921-143  
Pittsburgh, PA 15236-0940

**U.S. DEPARTMENT OF ENERGY  
FEDERAL ENERGY TECHNOLOGY CENTER  
REPORTING REQUIREMENTS CHECKLIST**

<b>1. AWARDEE:</b>		<b>2. IDENTIFICATION NUMBER:</b> PRDA DE-RA26-97BC15029 - Fundamental Geoscience for Reservoir Characterization																																																																																																																																							
<b>3. REPORT SUBMISSION ADDRESS:</b> All required report deliverables are identified with a ■ and are to be submitted to the following address: U.S. Department of Energy, Federal Energy Technology Center, ATTN: AAD Document Control, M/S 921-143, P.O. Box 10940, Wallace Road, Pittsburgh, PA 15236-0940.																																																																																																																																									
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The forms identified in the checklist are available from the cognizant Contract Specialist. Alternate formats are acceptable provided the contents remain consistent with the DOE form.																																																																																																																																									

## REPORTING DUE DATES

A (as required)	Within 10 calendar days after the event initiating the report for the record.
C (Change to Contractual Agreement)	Within 15 calendar days of significant change to the contract.
F (Draft Final Report)	Within 60 calendar days previous to completion date of the contract.
F (Final Report)	Upon the completion date of the contract.
M (Monthly)	Within 25 calendar days after the reporting period
O (Once After Award)	Within 30 calendar days of award date
Q (Quarterly) (Without a Draft)	Within 30 calendar days after the end of the quarter (Due Dates: January 30, April 30, July 30, and October 30)
Q (Quarterly) (Draft)	Within 30 calendar days after the end of the quarter (Due Dates: January 30, April 30, July 30, and October 30)
Q (Quarterly) (With a Draft)	Within 60 calendar days after the end of the quarter (Due Dates: February 28, May 30, August 30, and November 30)
S (Semi-Annual)	Within 6 months and 30 calendar days of date of award and every 6 months thereafter with the <b>exception</b> of the Subcontracting Report for Individual Contracts which has specific required dates of April 30 and October 30
X (With Proposal/Bid Application or with Significant Changes)	With Proposal/Bid/Application or with significant changes.
Y (Yearly or Upon Renewal of Contractual Agreement)	Within 30 calendar days of each period end date with the following exceptions:  SUMMARY SUBCONTRACT REPORT, SF295 due OCTOBER 30)  ANNUAL TECHNICAL REPORT (Draft) shall be submitted within thirty (30) days following the anniversary date of award, i.e., for an award dated Sept. 1, 1997, the draft Annual Technical Report would be due by October 1, 1997. The Annual Technical Report (Final) shall be due sixty (60) calendar days following the anniversary date of award.

## **INSTRUCTIONS FOR PREPARATION OF REPORTS REQUIRED UNDER THIS AWARD**

### **I. INTRODUCTION**

#### **Purpose**

To standardize, to the extent possible, the formats, forms, instructions and procedures used to prepare contract deliverables identified on the Reporting Requirements Checklist as deliverables.

### **II. DESCRIPTION FOR THE CONTENT AND FORMAT FOR PLANS AND REPORTS RELATING TO MANAGEMENT, COST, AND TECHNICAL ISSUES.**

NOTE: Only those reports designated on the DOE F 1332.1 with a "■" are required reports. The following text includes descriptions for some reports that are not a requirement of the proposed Contract.

#### **A. GENERAL MANAGEMENT**

##### **1. Management Plan**

The Management Plan describes the contractor's approach to performing the effort and producing the products identified in the contractual agreement, and the technical, schedule, cost, and financial management control systems to be used to manage that performance.

The outline for the Management Plan and a description of the contents follows:

##### **a. EXECUTIVE SUMMARY**

The executive summary gives DOE/FETC's management a brief, comprehensive overview of the most important aspects of the project.

##### **b. BACKGROUND**

This is a discussion of the background of the project, including the scientific, sociological, legislative, and historical factors, that demonstrates the contractor's understanding of the problems, both technical and management, associated with the project.

### c. SCOPE OF THE PROJECT

This section gives a brief overview of the project. It should include:

- general description of project objectives;
- task titles and short descriptions;
- participants.

### d. WORK BREAKDOWN STRUCTURE

The scope and complexity of the contractual agreement influence the number of levels required. Each descending level represents an increasingly detailed definition of the work elements. Level 1 is the goal or objective of the contractual agreement in its entirety. Level 2 consists of the major work products necessary for achieving the goals of the contractual agreement. Level 3 outlines the major element segments (subsystems) necessary for completing Level 2 elements. Work breakdown structure elements are identified by name and number from a progressive, alphanumeric system.

WBS Level 1: The overview should describe the philosophy underlying the selected technical approach.

WBS Levels 2 and 3:

WBS ELEMENT X.X: \_\_\_\_\_ (TITLE) \_\_\_\_\_

OBJECTIVE: State the objective of the task in a concise manner.

BACKGROUND (Not required for Construction Tasks):

- With respect to the project objective, what is the current state of understanding?
- Given the state-of-the-art, what are the outstanding issues which must be resolved in order to make progress?

TECHNICAL APPROACH (Not required for Construction Tasks): Describe in detail the manner in which the various issues will be resolved. The following are aspects of the work which should be considered and addressed (along with others you feel appropriate):

- What experiments will be performed and why?
- What materials will be used?

- What are the experimental conditions?
- What analytical techniques will be employed?
- What will be the approach to modeling?

In answering these questions, you should consider how the various tasks relate to one another and to other relevant ongoing work. Task outputs which feed into other tasks (and vice-versa) should be clearly delineated.

**DELIVERABLES** (Not required for Construction Tasks): Describe specifically the results of the task. These should include:

- raw and reduced data and method of presentation;
- brief description of models to be developed;
- other key results as appropriate.

#### e. **SUPPORT SYSTEMS AND CONTROLS**

In this section, the management, technical, and administrative system that will be used to control and execute the project will be described. Examples of the systems include: systems and engineering analysis, quality assurance, environmental, safety and health, legal support, ADP support, and accounting support.

## 2. **Status Report**

This report is the contractor project manager's narrative assessment of the status of the work being performed. Status should be reported by WBS element. Changes to contract objectives or technical approach are discussed in this report. Open items requiring action by either the contractor or the DOE Project Manager are noted in this report. A summary status assessment and forecast is also included.

The Status Report provides a concise narrative assessment of the status of the work being performed under the contractual agreement. DOE management uses the report to monitor status and to provide early recognition of potential problem areas. The report highlights changes to objectives, changes to technical approach, task variances from baselines in excess of stipulated thresholds by WBS reporting element, causative factors, and actions taken or proposed to resolve them, as well as factors with potential for causing significant variances in the future. Task progress may also be highlighted. The report next identifies open items requiring action by DOE or the participant. The report also provides a summary assessment of the current situation, including forecast of the near future and the expected impact on project accomplishment.

It briefly describes the work actually performed, and the overall status of the various tasks. It includes:

- narrative description of work performed and its relationship to previously planned activities;
- major accomplishments for each task in bullet form; and
- list of presentations and publications.

### **3. Summary Report (DOE F 1332.2)**

The Summary Report provides a concise, top-level summary of schedule, labor, and cost performance against the baseline plans. Most data are presented graphically. The format permits rapid visual comparison of schedule, labor, and cost data. There are three segments: a cost status graph, a labor status graph, and a milestone chart. The cost and labor graphs are cumulative presentations. Planned and actual numerical data presented are for the period specified. Labor and cost variances are shown on a monthly and cumulative basis.

## **B. SCHEDULE/LABOR/COST**

### **1. Milestone Schedule Plan (DOE F 1332.3)**

This section documents the planned project schedule in the standard DOE format (DOE F 1332.3). It includes a summary sheet showing all tasks/elements identified in the Work Breakdown Structure on a single form, and, for complex efforts, a separate sheet for each task/element which gives more detail. The planned events and milestones for each task/element are included. The standard symbols and charting conventions described on the reverse side of the form are used. The summary sheet includes a line labeled "administration," and denotes events such as subcontract awards, project reviews, etc. An associated milestone log provides a narrative description of events and anticipated dates of initiation/completion.

### **2. Labor Plan (DOE F 1332.4)**

This Plan establishes the planned utilization of labor for the term of the contract necessary to complete the planned work. For projects being managed at the fourth level of the WBS or greater, DOE F 1332.4, Labor Plan, is used. This information must also be reported by WBS element.



**3. Cost Plan (DOE F 1332.7)**

This Plan documents the project costs in the standard DOE format (DOE F 1332.7). A summary sheet shows costs for each WBS element on a separate line, and fee on a separate line. For projects being managed to the fourth WBS level, additional forms show cost detail for each task individually.

**4. Milestone Schedule/Status Report (DOE F 1332.3)**

This report shows the completion status of the activities and events that are shown on the Milestone Schedule Plan. The report also shows changes to the planned schedule. Like the Milestone Schedule/Plan, information is reported by WBS element. DOE Form 1332.3 is used for reporting schedule status.

**5. Labor Management Report (DOE F 1332.8)**

This is a periodic report of the status of the labor resources utilization to be compared with the Labor Plan. Labor information is reported by WBS element. DOE Form 1332.8 is used for this report.

**6. Cost Management Report (DOE F 1332.9)**

This report shows the cost status of the contract and is compared with the Cost Plan. Information is reported by WBS element. DOE Form 1332.9 is used for this report.

**C. EXCEPTION REPORTS**

**1. Conference Record**

The "Conference Record" documents for the DOE Contracting Officer's Representative, DOE Contracting Officer, and the contractor an understanding of significant decisions, direction or redirection, or required actions resulting from meetings with DOE representatives. It is required for any meeting, conference, or phone conversation in which a decision is made that may change the schedule, labor, cost, or technical aspects of the contractual agreement or the approved baseline plans. The report shall contain the following information as applicable:

- a. Report title ("Conference Record"), number, and the date prepared.
- b. Contract title and number, and the contractor's name and address.

- c. Date of meeting or telephone conversation, with a list of those involved and their titles.
- d. Subject(s) discussed, decisions reached, and directions given.
- e. Variances from previous directions and conclusions.
- f. Required actions.
- g. Distribution.
- h. Signature of preparer.

## 2. **Hot Line Report**

- a. The "Hot Line" Report may be used to report a major breakthrough in research, development, or design; an event causing a significant schedule slippage or cost overrun; an environmental, safety and health violation; achievement of or failure to achieve an important technical objective; or any requirement for quickly documented direction or redirection. The report shall be submitted by the most rapid means available, usually electronic, and should confirm telephone conversations with DOE representatives. Identification as a "Hot Line Report" serves notice at each link in the delivery chain that speed in handling is required. Unless otherwise agreed by the parties involved, DOE is expected to take action and respond in a similarly speedy manner. The report should include:
  - 1. Contractor's name and address;
  - 2. Contract title and number;
  - 3. Date;
  - 4. Brief statement of problem or event;
  - 5. Anticipated impacts; and
  - 6. Corrective action taken or recommended.
- b. Hot line reports shall document the incidents listed below, in addition to those required by the Uniform Reporting System (i.e., Paragraph A above):

1. Any single fatality or injuries requiring hospitalization of five or more individuals is to be immediately reported.
  2. Any significant environmental permit violation is to be reported as soon as possible, but within 24 hours of the discovery of the incident.
  3. Other incidents that have the potential for high visibility in the media are to be reported as quickly as possible, but within 24 hours following discovery.
  4. Any failure resulting in damage to Government-owned equipment in excess of \$50,000 is to be reported as quickly as possible, but within 24 hours of the discovery of the failure.
  5. Any unplanned event which is anticipated to cause a schedule slippage or cost increase significant to the project is to be reported within 24 hours.
  6. Any verbal or written Notice of Violation of any Environmental, Safety, and Health statutes arising from the performance of this contract is to be immediately reported.
  7. Any accidental spill or release which is in violation of any Environmental, Safety, and Health statutes arising from the performance of this contract is to be immediately reported, but within 24 hours of the discovery of the accident.
  8. Any incident which causes a significant process or hazard control system failure, or is indicative of one which may lead to any of the above defined incidents, is to be reported as soon as possible, but within 5 days of discovery.
- c. The requirement to submit Hot Line Reports for the incidents identified in b.1, b.2, b.3, b.6, or b.7 is for the sole purpose of enabling DOE officials to respond to questions relating to such events from the media and other public.
- d. When an incident is reported in accordance with b.4, b.5, b.6, b.7, or b.8, the contractor shall conduct an investigation of its cause and make an assessment of the adequacy of resultant action. A written report is required no later than ten (10) calendar days following the incident and shall include an analysis of the pertinent facts regarding

the cause, and a schedule of the remedial events and time periods necessary to correct the action.

- e. When an event results in the need to issue a written or verbal statement to the local media, the statement is to be cleared first, if possible, by the FETC Office of Institutional Development and coordinated with the Government's Contracting Officer Representative.

#### D. PERFORMANCE MEASUREMENT

The importance and complexity of major system acquisitions and major projects require assurance that the contractor employs effective management control on contracted work. A Management Control System Description and a Work Breakdown Structure Dictionary are normally required of a contractor as part of "The Management Plan" when the cost and schedule control systems criteria are applied to a contract.

- 1. **Management Control System Description**
- 2. **WBS Dictionary**
  - i. **Index**
  - ii. **Element Definition**

#### **Cost Performance Reports (Performance Measurements)(Support Service)**

##### a. **Format 1 - WBS (DOE F 1332.12)**

This report is used to report cost and schedule performance by work breakdown structure element. It is usually limited to level 3 of the contractor work breakdown structure. Reporting at lower levels of the work breakdown structure may be required for critical activities.

##### b. **Format 2 - Function (DOE F 1332.13)**

This report is used to report cost and schedule performance in accordance with the contractor's internal organizational structure. The totals on this report are consistent with the totals in Format 1. Format 2, in conjunction with Format 1, provides a two-dimensional view of the contractor's cost and schedule performance.

##### c. **Format 3 - Baseline (DOE F 1332.14)**

The report format provides a monthly update of the performance measurement baseline to reflect the overall effects of changes made during

the month. It also provides a summary track from the original contract negotiated cost to current costs (negotiated and unpriced).

## E. TECHNICAL

### 1. Preparation

- a. General. The Contractor is responsible for providing all technical reports that are identified in the Reporting Requirements Checklist.

The Contractor shall submit one good quality hard copy using either permanent or alkaline paper plus an electronic version of each technical report, including, but not limited to, all text, tables, diagrams, photographs, schematics, graphs, and charts. Electronic reports shall be submitted in both the Adobe Acrobat Portable Document Format (PDF) and ASCII.

The Title Page Form Maker Template must be submitted as a separate file (named as stated in 2(C) below) utilizing the Title Page Form Maker provided to you on a diskette. The Title Page Form Maker must be installed on a hard drive and must be run in a Windows environment. Instructions for using the Form Maker are included as a file on the diskette.

- b. Organization of Technical Reports. The following sections should be included (as appropriate) in technical reports in the sequence shown:

Title Page\*  
Disclaimer\*  
Abstract\*  
Table of Contents  
List(s) of Graphical Materials  
Executive Summary  
Introduction  
Results and Discussion  
Conclusion  
References  
Bibliography  
List of Acronyms and Abbreviations  
Appendices (if necessary)  
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\* Any section denoted by an asterisk is required in all technical reports.

The Title Page of the report itself must contain the following information IN THE FOLLOWING SEQUENCE:

Report Title

Type of Report (Quarterly, Semi-Annual, Annual, Topical, Final, etc.)

Reporting Period Start Date

Reporting Period End Date

Principal Author(s)

Date Report was issued (Month [spelled out] and Year [4 digits])

DOE Award Number (e.g., DE-AC26-97FT12345)

Name and address of submitting organization. (This section should also contain the name and address of significant contractors or subcontractors who participated in the production of the report.)

The Disclaimer must follow the title page, and must contain the following paragraph:

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

- c. Other Documents Not Identified in the Reporting Requirements Checklist (Journal Articles, Conference Papers and Proceedings, etc.). The Contractor shall submit an electronic version of each such document, including, but not limited to, all text, tables, diagrams, photographs, schematics, graphs, and charts. Such documents shall be submitted in both the Adobe Acrobat Portable Document Format (PDF) and ASCII.
- d. Company Names and Logos. Except as indicated in B. above, company names, logos, or similar material should not be incorporated into reports.
- e. Copyrighted Material. Copyrighted material should not be submitted as part of a report unless written authorization to use such material is received from the copyright owner and is submitted to DOE with the report.
- f. Measurement Units. All reports to be delivered under this instrument shall use the SI Metric System of Units as the primary units of measure. When reporting units in all reports, primary SI units shall be followed by their U.S. Customary Equivalents in parentheses ().

The Contractor shall insert the text of this clause, including this paragraph, in all subgrants or subcontracts under this contract.

Note: SI is an abbreviation for "Le Systeme International d'Unites."

## 2. Electronic Media Standard

- a. File Format. Production of high-quality, electronic documents is dependent on the quality of the input that is provided. Thus, the Contractor shall submit an electronic version of all reports in the Adobe Acrobat Portable Document Format (PDF). Each report shall be an integrated file that contains all text, tables, diagrams, photographs, schematics, graphs, and charts.
- b. Submission Format. The electronic file(s) shall be submitted via diskette, file transfer protocol (ftp), or CD-ROM. Diskettes or CD-ROMs must be labeled as follows, and if the ftp alternative is used, an e-mail message sent in conjunction with the ftp file, or a companion ftp file, must contain the following information:

DOE Award Number

Type of Report(s) (Quarterly, Semi-Annual, Annual, Topical, Final)

Reporting Period (if applicable)

Name of submitting organization

Name, phone number and fax number of preparer

Diskette: Diskettes must be 3.5" double-sided, high-density (1.4 M Byte capacity). If file compression software is used to transmit a PDF file spanning more than one diskette, PKZIP from PKWare, Inc., is the required compression software. For diskettes only: State the number of diskettes in the set (e.g., 1/3)

ftp: At the Contractor's discretion, DOE will provide an unsecured ftp location for electronic transmission of documents. Only final versions of technical reports may be submitted using the ftp alternative.

CD-ROM: The electronic file(s) may be submitted on an ISO9660-format CD-ROM.

- c. File Naming. In naming the electronic file, awardee shall use the standard eight-character naming convention for the main file name, and "PDF" as the three-character extension.

For the main file name, the first five characters are the last five digits from the award number; e.g., for Award Number DE-AC26-97FT12345, the first five characters are 12345.

The next character is a letter that corresponds to the type of report: R is for the Technical Report.

The remaining two characters indicate the chronological number of the particular type of report; e.g., Quarterly Technical Progress Reports for a 5-year award are numbered R01 through R20. If monthly, annual, and a Final Technical Report are also required, the numbers would run from R01 through R86 (60 monthly reports, 20 quarterly reports, 5 annual reports, and 1 final report).



Thus, the main file name for the Sixth Quarterly Technical Progress Report under Award No. DE-AC26-97FT12345 (and no other technical progress reports are required) would be 12345R06.

There will be three files submitted. The Technical Report file name for the PDF file would be 12345R06.PDF. The Technical Report file name for the ASCII file will be 12345R06.TXT. The Title page will automatically name itself when saved to a disk in the a: or b: drive and will not be a PDF file.

### 3. Reports

#### a. **Technical Progress Report (Quarterly, Semi-Annual and Annual)**

Technical progress reports shall contain the sections identified in Organization of Technical Reports above.

The Abstract shall be a concise summary of the report.

The Executive Summary will be a statement of the original objectives of the effort and a concise summary of the progress achieved during the reporting period.

The body of the report should contain a full account of progress, problems encountered, plans for the next reporting period, and an assessment of the prospects for future progress.

The Technical Progress Report should include sufficient detail to allow the work to be reproduced by others. Results and reduced data shall be presented together with a discussion of the relevance of the findings. When experimental systems and/or procedures are being utilized for the first time, they shall be described in detail. This description shall contain detailed information on equipment and procedures utilized, as well as providing a rationale for their use. All data reduction and transformation methods shall be fully documented.

Informational items in technical reports shall include:

- **Experimental Apparatus**

A comprehensive description, including dimensioned drawings or sketches, of the apparatus and associated diagnostic measurement equipment employed to perform the experimental research.

- **Experimental and Operating Data**

All experimental data acquired during the course of research including detailed characterization of the sample materials subjected to experimentation.

- **Data Reduction**

A complete description of the methods employed to transform raw measured data into a form usable for interpretation along with any assumptions or restrictions inherent in the method and the resultant reduced data.

- **Hypothesis and Conclusions**

Logic for drawing conclusions or developing hypotheses shall be clearly stated along with applicable assumptions or restrictions.

**b. Final Technical Report**

The Final Technical report shall contain the sections identified in Organization of Technical Reports above.

The Abstract shall be a concise summary of the report.

The Executive Summary will be a statement of the original objectives of the effort and a concise summary of the work performed during the contract period.

The Final Technical Report shall document and summarize all work performed during the contract period in a comprehensive manner. It shall also present findings and/or conclusions produced as a consequence of this work.

This report shall not merely be a compilation of information contained in subsequent quarterly, or other technical reports, but shall present that information in an integrated fashion, and shall be augmented with findings and conclusions drawn from the research as a whole.

**c. Topical Report**

Topical reports shall contain the sections identified in Organization of Technical Reports above.

The Abstract shall be a concise summary of the report.

The Executive Summary will be a statement of the original objectives of the effort and a concise summary of the progress achieved during the reporting period.

These reports usually provide a comprehensive statement of the technical results of the work performed for a specific task or subtask of the SOW, or detail significant new scientific or technical advances. If required, DOE shall review and approve the report outline prior to submission of the report.

#### **F. Environmental Reporting**

In response to the requirements of the National Environmental Policy Act of 1969 (NEPA) and other related environmental statutes,<sup>1</sup> the Federal Energy Technology Center (FETC) requires the submission of various documents that assess the environmental aspects and projected impacts of all of its proposed actions. These documents include the following: (1) Hazardous Substance Plan, (2) Hazardous Waste Report, (3) Environmental Compliance Plan, (4) Environmental Monitoring Plan, and (5) Environmental Status Reports.

The environmental information provided in the above reports will enable PETC to fulfill its responsibilities under NEPA<sup>2</sup> and to monitor the proposer's compliance with other environmental regulations. The implementation of any task associated with a proposed action will be dependent upon DOE submitting and acquiring the approval (from DOE's Office of Environment, Safety, and Health) of necessary NEPA documentation, as well as the proposer's proven compliance with other applicable environmental requirements, such as air permits, or RCRA manifests. Therefore, to minimize the risk of project delays, it is imperative that these reports be submitted in a timely manner.

The information contained herein specifies the basic environmental requirements for this procurement action, but it is not to be interpreted as containing all necessary information for any given project. Likewise, certain aspects of the

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The related statutes include, but are not limited to the National Historic Preservation Act, the Endangered Species Act, the Fish and Wildlife Coordination Act, the Floodplain/Wetlands Regulations, the Coastal Zone Management Act, the Farmland Protection Policy Act, the American Indian Religious Freedom Act, the Wild and Scenic Rivers Act, the Resource Conservation & Recovery Act, Comprehensive Environmental Response, the Compensation and Liability Act, Clean Air Act, and Clean Water Act.

Additional information about the requirements of the National Environmental Policy Act can be found in the DOE NEPA Compliance Guide and 40 CFR 1021.

requirements may not be applicable. Accordingly, the level of information provided should be sufficient for DOE to assess the environmental implications of the proposed action.

**1. Hazardous Substance Plan**

The Contractor shall submit a **Hazardous Substance Plan** not later than thirty (30) days after initial contract award. The Plan shall specifically identify each Hazardous Substance (as defined under 40 CFR 261, Subpart D, entitled Lists of Hazardous Wastes) **anticipated** to be purchased, utilized or generated in the performance of this contract. For **each** such Hazardous Substance identified, the Plan shall specifically provide the following information:

**Description of Substance/Chemical**

**EPA Hazardous Waste Number**

**EPA Hazard Code**

**Anticipated Quantity to be purchased, utilized or generated**

**Anticipated Hazardous Waste Transporter**

**Anticipated Hazardous Waste Disposal Facility Contractor and Location (City/Municipality, State)**

**Anticipated Treatment Method**

**2. Hazardous Waste Report**

The Contractor shall submit a **Hazardous Waste Report** with the final technical report. The Report shall specifically identify each Hazardous Waste (as defined under 40 CFR 261, Subpart D, entitled Lists of Hazardous Wastes) **actually** utilized, or generated in the performance of this contract. For **each** such Hazardous Waste identified, the Report shall specifically provide the following information:

**Description of Substance/Chemical**

**EPA Hazardous Waste Number**

**EPA Hazard Code**

**Actual Quantity Disposed**

**Actual Hazardous Waste Transporter**

**Actual Hazardous Waste Disposal Facility Contractor and Location (City/Municipality, State)**

**Actual Disposal Date**

**Actual Treatment Method**

The Hazardous Waste Report is intended as a final reconciliation of anticipated versus actual Hazardous Substances purchased, utilized, or generated in the performance of this contract.

### 3. **Environmental Compliance Plan**

The Environmental Compliance Plan (ECP) shall be submitted within thirty (30) days of contract award and should outline an approach to implementing an environmental monitoring and reporting strategy. This strategy should include plans for submitting a Quality Assurance/Quality Control Plan and Pollution Prevention Plan,<sup>3</sup> conducting environmental monitoring of the proposed action and submitting Environmental Status Reports. The ECP should also address any concerns and/or deviations associated with the reporting and monitoring documents.

#### Suggested Format for Environmental Compliance Plan (ECP)

- I. SUMMARY OF PROPOSED PROJECT
- II. FEDERAL REGULATORY COMPLIANCE (Discuss how each of the following will be complied with, if applicable.)
  - A. National Historic Preservation Act
  - B. Endangered Species Act
  - C. Fish and Wildlife Coordination Act
  - D. Floodplain/Wetlands Regulations
  - E. Coastal Zone Management Act
  - F. Farmland Protection Policy Act
  - G. American Indian Religious Freedom Act
  - H. Wild and Scenic Rivers Act
  - I. Resource Conservation & Recovery Act
  - J. Comprehensive Environmental Response, Compensation and Liability Act
  - K. Clean Air Act
  - L. Clean Water Act
  - M. Pollution Prevention Act
- III. STATE AND LOCAL REGULATORY COMPLIANCE (Discuss how any state and local regulations will be complied with.)

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<sup>3</sup>If an ECP is required the format of the QA/QC Plan and Pollution Prevention Act will be determined in conjunction with PETC environmental staff.

#### **4. Environmental Monitoring Plan**

IF DOE's analysis of the potential environmental impacts of the proposed action (through review of the proposer's Environmental Volume or Environmental Assessment Questionnaire) identifies a need for environmental monitoring, the Contractor will also submit a draft Environmental Monitoring Plan (EMP) within thirty (30) days of contract award. After consultation with DOE, the draft EMP will be revised, as necessary, and a final EMP will be in place prior to the initiation of any activities that are not categorically excluded under NEPA. The EMP may be revised as the project dictates.

The EMP should evaluate air, land, and water resources, and waste production, using three specific types of monitoring:

- A. Compliance Monitoring,
- B. Unregulated Pollutant Monitoring, and, if necessary,
- C. NEPA-related Monitoring.

Compliance monitoring, i.e., environmental and health monitoring required by Federal, State, and local regulatory agencies, should detail the location, frequency, duration, and substances being monitored. All necessary applications, permits, and licenses should be identified.

Unregulated pollutants, both the amount and type of each, should be monitored. This includes those pollutants (a) not currently regulated by State or Federal laws but for which new regulations are expected in the near future; (b) which may cause environmental or health concerns based on hazardous/toxic compound lists; and (c) which are expected in discharge streams based on test data or process chemistry.

Finally, NEPA-related monitoring should be implemented as necessary. It should identify and/or confirm the impacts of the substances produced and performance of the specific technologies as predicted in the NEPA document. It should also include reporting on any mitigation action identified in the Finding of No Significant Impact or Record of Decision as a condition of approval of the proposed action (reported annually).

#### **5. Environmental Status Report**

After approval of the comprehensive EMP, and as deemed necessary by the DOE Project Manager, the results of sampling conducted and other environmental compliance information should be submitted in the form of

Environmental Status Reports (ESRs). The necessity of these reports will depend on the size and nature of the project; they will be required quarterly.

The data reported in the ESRs will supplement the project's NEPA documentation. It will also ensure that project impacts (a) do not violate applicable environmental regulations and (b) are not detrimental to human health or the environment. The information will also provide a database that can be utilized to mitigate environmental problems associated with commercializing any proposed technologies.

#### Suggested Format for Environmental Status Reports

### I. SUMMARY OF MONITORING PERFORMED (Compliance and Supplemental Monitoring)

#### A. MONITORING PARAMETERS

1. Location
2. Stage of Project (e.g., preconstruction, operational, etc.)
3. Source to be Monitored (e.g., stack emissions)
4. Method of Monitoring

#### B. DATA ANALYSIS

1. Identification/characterization of emissions, effluents, etc. and their concentration
2. Identification of problem areas/non-compliance
3. Suggestions for modifications/changes to the system
4. Recommendations to revise Monitoring Plan

### II. PERMIT COMPLIANCE STATUS

- A. Attach copies of compliance reports, analyses, correspondence between the Contractor and the appropriate regulatory agencies.
- B. Attach copies of all manifests, shipping documents, etc. pertaining to the disposal of wastes generated from the project.

**6. Toxic Chemical Release Inventory Form**

As part of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act, facilities are required to submit a Toxic Chemical Release Inventory (Form R) to report to the U.S. Environmental Protection Agency the release of toxic chemicals. Copies of this form will be made available to all contractors/ grantees requesting it from their respective Contract Specialist. Contractors/grantees are only required to submit this form if the facility in which they are working manufactures 25,000 lbs. per year, or uses 10,000 lbs. per year of a toxic chemical/compound listed in 40 CFR 372 Subpart D - specific Toxic Chemical Listings.

Questions regarding the form can be addressed to: EPRCA Reporting Center, P.O. Box 3340, Merrifield, VA 22116-3348, ATTN: Toxic Chemical Release Inventory.

**7. Notification of Environmental, Safety, and Health Violations**

Written Notice of Violation of any Federal Environmental, Safety and Health statutes including those listed below (or any state, county or municipal law deriving from such federal statute) arising from the performance of this contract, that is received by the Contractor from any Federal, state, county or municipal authority shall be immediately communicated to the Government Contracting Officer Representative (COR) identified under Part I, Section G.#. Such communication shall be by telephone and shall occur not later than twenty-four (24) hours following the date of written Notice of Violation.

The telephone communication shall be followed by written report to the COR, to be delivered in an original and two (2) copies not later than ten (10) days following the date of the written Notice of Violation. Such written report shall include a the Violation, an analysis of the pertinent facts preceding the violation, and a schedule of the remedial events necessary to bring the contractor into compliance.

Environmental, Safety and Health Statutes

Clean Air Act

Clean Water Act

Resource Conservation and Recovery Act

Comprehensive Environmental Response, Compensation, and Liability Act

Toxic Substance Control Act



Occupational Safety and Health Act  
Safe Drinking Water Act

**8. Notification of Accident, Spill, or Unregulated Release**

Any accident, spill, or unregulated release which is in violation of any Federal Environmental, Safety and Health statutes including those listed below (or any state, county or municipal law deriving from such federal statute) arising from the performance of this contract, upon its being reported to the proper Federal, state, county or municipal authority, shall be immediately communicated to the Government Contracting Officer Representative (COR) identified under Part I, Section G.#. Such communication shall be by telephone and shall occur not later than twenty-four (24) hours following the date of written Notice of Violation.

The telephone communication shall be followed by written report to the COR, to be delivered in an original and two (2) copies not later than ten (10) days following the incident being reported. Such written report shall include a copy of the violation, an analysis of the pertinent facts preceding the incident, and a schedule of the remedial events necessary to bring the contractor into compliance.

Environment Safety and Health Statutes

Clean Air Act  
Clean Water Act  
Resource Conservation and Recovery Act  
Comprehensive Environmental Response, Compensation, and Liability Act  
Toxic Substance Control Act  
Occupational Safety and Health Act  
Safe Drinking Water Act

**G. Other**

**1. Key Personnel Staffing Report**

A report shall be filed providing information on the number of hours (by WBS element/task) that each of the key personnel listed in the contract have applied to the contract during the reporting time period.

**2. Subcontract Reporting**

With the exception of a small business, reports listed below are required to be submitted by the prime contractor for each contract containing a

subcontracting plan. These forms collect subcontract award data from prime contractors/subcontractors that: (a) hold one or more contracts over \$500,000 (over \$1,000,000 for construction of a public facility); and (b) are required to report subcontracts awarded to Small Business (SB), Small Disadvantaged Business (SDB), and Women-Owned Small Business (WOSB) concerns under a subcontracting plan. Subcontract award data reported on these forms by prime contractors/subcontractors shall be limited to awards made to their immediate subcontractors.

- a. **Subcontracting Report (SF294)**
- b. **Summary Subcontracting Report (SF295)\***

\* modified in accordance with DEAR 952.226-73, Energy Policy Act Subcontracting Goals and Reporting Requirements.

### 3. SOFTWARE

Major pieces of computer software developed largely as a result of the performance of this effort shall be delivered to the Government shortly after development or at the completion of the effort, as appropriate. The software shall be delivered together with sufficient documentation concerning its development and use to permit future use by others, and to provide a firm basis for allowing modifications to be made in any subsequent development efforts. Unless otherwise specified, software shall be written in a standard computer language such as Fortran 77, operate on the VAS VMS version 5.1 operating system or an IBM PC-compatible personal computer running MS/DOS, and should not incorporate or be dependent on the use of proprietary software.

It is important to note that the source code, executable files, and appropriate manuals shall be required to be made available to the public through DOE publications.

## H. PROPERTY REPORTS

### 1. **SEMI-ANNUAL SUMMARY REPORT OF DOE-OWNED PLANT AND CAPITAL EQUIPMENT DOE-F4300.3**

<u>Period End Date</u>	<u>Due Date</u>	<u>No. of Copies</u>
February 28 and August 31	April 15  September 15	3

Description and Format

PETC Handbook entitled "Management of Government Property in the Possession of Contractors" Use DOE F4300.3

Use Form PETC F 4220.35 Format (enclosed).

**2. REPORT OF PHYSICAL INVENTORY OF PERMANENTLY AFFIXED PLANT**

<u>Period End Date</u>	<u>Due Date</u>	<u>No. of Copies</u>
Not less frequently than every 10 years	10 years from award date	1

Description and Format

See FAR 45.5 and DEAR 945.5.

**3. REPORT OF PHYSICAL INVENTORY OF CAPITAL EQUIPMENT**

<u>Period End Date</u>	<u>Due Date</u>	<u>No. of Copies</u>
Not less frequently than every 2 years	2 years from award date and every 2 years thereafter	1

Description and Format

See FAR 45.5 and DEAR 945.5.

**4. REPORT OF PHYSICAL INVENTORY OF SENSITIVE ITEMS**

<u>Period End Date</u>	<u>Due Date</u>	<u>No. of Copies</u>
Not less frequently than annually	1 year from date of award and yearly thereafter	1

Description and Format

See FAR 45.5/.6 and DEAR 945.5/6.

**5. REPORT OF TERMINATION OR COMPLETION INVENTORY**

<u>Period End Date</u>	<u>Due Date</u>	<u>No. of Copies</u>
Immediately upon completion or termination	Immediately upon completion or termination date	1

Description and Format

See FAR 45.5/.6 and DEAR 945.5/6. Use form enclosed with PETC Handbook.

**6. REPORT OF CONTRACTOR'S PROPERTY MANAGEMENT SYSTEM**

<u>Period End Date</u>	<u>Due Date</u>	<u>No. of Copies</u>
None	Within 6 months of award	3

Description and Format

This report shall consist of the Contractor's comprehensive written property management system. It shall address the Contractor's written system for controlling, protecting, preserving and maintaining all Government property. Report format shall be consistent with Contractor's system and shall as a minimum enable comprehensive evaluation by the Government.

**7. ANNUAL REPORT OF GOVERNMENT-OWNED PROPERTY**

<u>Period End Date</u>	<u>Due Date</u>	<u>No. of Copies</u>
September 30	October 15	3

Description and Format

See FAR 45.505-14.

U.S. Department of Energy  
Federal Energy Technology  
**Billing Instructions**  
(Cost Reimbursement Contracts)

These instructions are provided for use by the Contractor in the preparation and submission of vouchers requesting reimbursement for work performed under cost reimbursement contracts. Compliance with these instructions will reduce correspondence and other causes for delay to a minimum, and will thus promote prompt payments to the Contractor.

- I. VOUCHER FORM. In requesting reimbursement, the Contractor shall use Standard Form (SF) 1034, "Public Voucher for Purchases and Services Other Than Personal" (attached), accompanied by Form 4220.50, "Statement of Cost" (attached), and provide additional supporting documentation as required (sample format attached).
- II. PREPARATION OF SF 1034 (Complete as directed by numerical guidance below where annotated in the sample form attached)
  - (1) Leave these blocks blank.
  - (2) Enter Voucher Number consecutively, commencing with "1".
  - (3) Enter date voucher is prepared.
  - (4) Enter contract number and date of contract award.
  - (5) Enter contractor's name and remittance address.
  - (6) Include telephone number of office responsible for submitting voucher.
  - (7) If a task order or project agreement is involved in the billing, enter the number and date, otherwise, leave blank.
  - (8) Provide the inclusive period the billing covers (e.g. "Jan. 199X" or "Jan. - Mar. 199X").
  - (9) Enter the dollar amount. Amount claimed must agree with the amount reflected in the attached Statement of Cost.
  - (10) Check appropriate block for the type of payment for which reimbursement is requested.
- III. STATEMENT OF COST: This form shall be completed so as to make due allowance for the Contractor's cost accounting system. The costs claimed shall be only those recorded costs (including cost sharing) which are authorized for billing by the payment provisions of the contract. Indirect rates claimed shall reflect actual experience, but in no event shall exceed those rates approved by the Contracting Officer for billing purposes. The Certification (block 11) must be signed by a responsible official of the Contractor. Additional supporting data for claimed costs shall be provided in such form and reasonable detail as outlined below.
- IV. SUPPORTING DOCUMENTATION: Direct costs (e.g. labor, equipment, travel, supplies, etc.) claimed for reimbursement on the Statement of Cost must be adequately supported. The level of detail provided must clearly indicate where the funds were expended. For example, support for labor costs must include the labor category (e.g. program manager, senior engineer, technician, etc.), the hourly rate, and the labor cost per category; equipment costs must be supported by a list of the equipment purchased, along with the item's cost; supporting data for travel must include the destination of the trip, number and labor category of travelers, transportation costs, per diem costs, and purpose of trip; and supplies should be categorized by the nature of the items (e.g. office, lab, computer, etc.) and the dollar amount per category. Indirect rates used for billings must be clearly indicated, as well as their basis of application. Attachment 3 is an example of the minimum level of supporting documentation required for each voucher submitted for reimbursement. A Standard Form 1035, "Public Voucher for Purchases and Services Other Than Personal, Continuation Sheet" was utilized to provide the supporting documentation in this example. Use of this standard form is optional; the Contractor may utilize its own computer-generated reports (e.g. payroll distribution reports, travel reports, etc.) to provide the necessary supporting documentation.
- V. BILLING PERIOD: The voucher shall be submitted no more frequently than monthly (unless prior written consent for more frequent billing is obtained from the Contracting Officer). The period of performance covered by the vouchers should be the same as covered by any required monthly technical progress reports and/or monthly cost reports.
- VI. SUBMISSION PROCEDURE: Submit original voucher and three (2) copies (each containing a Statement of Cost and adequate supporting documentation) to the addressees prescribed by in Part I, Section G of this contract.

Standard Form 1035 Revised January 1980 Department of the Treasury 1 TFRM 4-2000		<b>PUBLIC VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL</b>				VOUCHER NO.  (2)			
U.S. DEPARTMENT, BUREAU OR ESTABLISHMENT AND LOCATION U.S. Department of Energy Federal Energy Technology Center					Date Voucher Prepared  (3)		SCHEDULE NO.  (1)		
					Contract No. / Date (4)		PAID BY  (1)		
					Requisition No. / Date (1)				
PAYEE'S NAME AND ADDRESS  (5)						DATE INVOICE RECEIVED (1)			
						DISCOUNT TERMS (1)			
						PAYEE'S ACCOUNT NO. (1)			
SHIPPED FROM TO WEIGHT					GOVERNMENT B/L NUMBER (1)				
NUMBER AND DATE OF ORDER	DATE OF DELIVERY OR SERVICE	ARTICLES OR SERVICES <small>(Enter description, item number of Contract or Federal Supply Schedule, and other information deemed necessary)</small>		QUANTITY	UNIT PRICE		AMOUNT		
					COST	PER	(1)		
(7)	(8)	For reimbursement of costs incurred under the subject contract as detailed in the attached Statement of Costs and supporting documentation					(9)		
(Use continuation sheet(s) if necessary)(PAYEE MUST NOT use the space below)						TOTAL		(10)	
PAYMENT (10) <input type="checkbox"/> Provisional <input type="checkbox"/> Complete <input type="checkbox"/> Partial <input type="checkbox"/> Final <input type="checkbox"/> Progress <input type="checkbox"/> Advance	APPROVED FOR  =\$	EXCHANGE RATE  = \$1.00		Differences					
	BY:								
			Amount verified; correct for						
	TITLE:		Signature or Initials						
Pursuant to the authority vested in me, I certify that this voucher is correct and proper for payment.									
_____ (Date) (Authorized Certifying Official) (Title)									
ACCOUNTING CLASSIFICATION									
<b>PAID BY</b>	CHECK NUMBER		ON ACCOUNT OF U.S. TREASURY		CHECK NUMBER		ON (Name of Bank)		
	CASH \$		DATE		PAYEE				
1 When stated in foreign currency, insert name of currency 2 If the ability to certify and authority to approve are combined in one person, only one signature is necessary; otherwise the approving officer will sign in the space provided, over his title. 3 When a voucher is receipted in the name of a company of corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary", or "Treasurer", as the case may be.					PER				
					TITLE				

**PRIVACY ACT STATEMENT**

The information requested on this form is required under the provisions of 31 U.S.C. 82b and 82c, for the purpose of disbursing Federal money. The information requested is to identify the particular creditor and the amounts to be paid. Failure to furnish this information will hinder discharge of the payment obligation.

Standard Form 1035 Revised January 1980 Department of the Treasury 1 TFRM 4-2000		<b>PUBLIC VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL</b>				VOUCHER NO.  (2)		
U.S. DEPARTMENT, BUREAU OR ESTABLISHMENT AND LOCATION  U.S. Department of Energy Federal Energy Technology Center					Date Voucher Prepared  (3)		SCHEDULE NO.  (1)	
					Contract No. / Date (4)		PAID BY  (1)	
					Requisition No. / Date (1)			
PAYEE'S NAME AND ADDRESS  (5)						DATE INVOICE RECEIVED (1)		
						DISCOUNT TERMS (1)		
						PAYEE'S ACCOUNT NO. (1)		
SHIPPED FROM TO WEIGHT					GOVERNMENT B/L NUMBER (1)			
NUMBER AND DATE OF ORDER	DATE OF DELIVERY OR SERVICE	ARTICLES OR SERVICES <small>(Enter description, item number of Contract or Federal Supply Schedule, and other information deemed necessary)</small>	QUANTITY	UNIT PRICE		AMOUNT		
				COST	PER	(1)		
(7)	(8)	For reimbursement of costs incurred under the subject contract as detailed in the attached Statement of Costs and supporting documentation				(9)		
(Use continuation sheet(s) if necessary)(PAYEE MUST NOT use the space below)						TOTAL		(10)
PAYMENT (10) <input type="checkbox"/> Provisional <input type="checkbox"/> Complete <input type="checkbox"/> Partial <input type="checkbox"/> Final <input type="checkbox"/> Progress <input type="checkbox"/> Advance	APPROVED FOR  =\$	EXCHANGE RATE  = \$1.00	Differences					
	BY:							
			Amount verified; correct for					
	TITLE:		Signature or Initials					
Pursuant to the authority vested in me, I certify that this voucher is correct and proper for payment.								
_____ (Date) (Authorized Certifying Official) (Title)								
ACCOUNTING CLASSIFICATION								
PAID BY	CHECK NUMBER		ON ACCOUNT OF U.S. TREASURY		CHECK NUMBER		ON (Name of Bank)	
	CASH \$		DATE		PAYEE			
1 When stated in foreign currency, insert name of currency 2 If the ability to certify and authority to approve are combined in one person, only one signature is necessary; otherwise the approving officer will sign in the space provided, over his title. 3 When a voucher is receipted in the name of a company of corporation, the name of the person writing the company or corporate name, as well as the capacity in which he signs, must appear. For example: "John Doe Company, per John Smith, Secretary", or "Treasurer", as the case may be.						PER		
						TITLE		

**PRIVACY ACT STATEMENT**

The information requested on this form is required under the provisions of 31 U.S.C. 82b and 82c, for the purpose of disbursing Federal money. The information requested is to identify the particular creditor and the amounts to be paid. Failure to furnish this information will hinder discharge of the payment obligation.

Standard Form 1035 September 1973 4 Treasury FRM 2000 1035-110		--- S A M P L E ---  <b>PUBLIC VOUCHER FOR PURCHASES AND SERVICES OTHER THAN PERSONAL</b>  Continuation Sheet				Voucher No.
						Schedule No.
						Sheet No.
U.S. DEPARTMENT, BUREAU OR ESTABLISHMENT						
NUMBER AND DATE OF ORDER	DATE OF DELIVERY OR SERVICE	ARTICLES OR SERVICES <small>(Enter description, item number of Contract or Federal Supply Schedule, and other information deemed necessary)</small>	QUAN- TITY	UNIT PRICE		AMOUNT
				COST	PER	
--- S A M P L E ---  <div> <div>1/ 1/95- 2/ 1/95</div> <div>           DIRECT LABOR           <ul style="list-style-type: none"> <li>• Project Manager</li> <li>• Senior Engineer</li> <li>• Technician</li> </ul> </div> <div>           80 120 160         </div> <div>           37.50 30.00 20.00         </div> <div>           hr. hr. hr.         </div> <div>           \$ 3,000.00 3,600.00 <u>3,200.00</u> \$ 9,800.00         </div> </div> <div> <div>1/10/95</div> <div>           EQUIPMENT           <ul style="list-style-type: none"> <li>• Gas Chromatograph (Manufacturer)</li> <li>• Pulverizer (Manufacturer)</li> <li>• 486 Computer (Vendor)</li> </ul> </div> <div>           1 1 1         </div> <div>           50,000 7,500 2,500         </div> <div>           ea. ea. ea.         </div> <div>           \$ 50,000.00 7,500.00 <u>2,500.00</u> \$ 60,000.00         </div> </div> <div> <div>1/15/95</div> <div>           TRAVEL           <ul style="list-style-type: none"> <li>• Destination - Pittsburgh, PA</li> <li>• Purpose - Review Meeting</li> <li>• Traveler(s) - Project Manager</li> <li>• Air Fare</li> <li>• Lodging</li> <li>• Per Diem</li> </ul> </div> <div>           1 2 2         </div> <div>           500 75 35         </div> <div>           ea. day day         </div> <div>           \$ 500.00 150.00 <u>70.00</u> \$ 720.00         </div> </div> <div> <div>1/25/95</div> <div>           SUPPLIES           <ul style="list-style-type: none"> <li>• Laboratory</li> <li>• Office</li> <li>• Computer</li> </ul> </div> <div>           1 1 1         </div> <div>           1,000 300 200         </div> <div>           Lot Lot Lot         </div> <div>           \$ 1,000.00 300.00 <u>200.00</u> \$ 1,500.00         </div> </div> <div> <div></div> <div>           --- S A M P L E ---         </div> </div>						



## ATTACHMENT B

1. CONTRACTOR NAME		2. CONTRACT NO.	3. VOUCHER NO.
4. CONTRACTOR ADDRESS		5. PERIOD OF PERFORMANCE COVERED BY THIS BILLING	
6. <u>CONTRACT AMOUNT:</u> (Face Value)  Estimated Cost: \$ _____  Fixed Fee (If Any): \$ _____  TOTAL: \$ _____		7. <u>AMOUNT AUTHORIZED FOR EXPENDITURE:</u> (Obligated)  Basic Contract: \$ _____  All Modifications: \$ _____  Contract to Date - TOTAL: \$ _____	
8. CLAIMED COSTS		9. AMOUNT CLAIMED FOR THIS BILLING PERIOD	10. CUMULATIVE CLAIMED FOR THIS BILLING PERIOD
Direct Labor		\$	\$
Other Labor		\$	\$
Fringe Benefits @ _____%		\$	\$
Overhead @ _____%		\$	\$
Nonexpendable Items		\$	\$
Material and Supplies		\$	\$
Equipment		\$	\$
Travel		\$	\$
#1 Subcontractor: _____		\$	\$
#2 Subcontractor: _____		\$	\$
#3 Subcontractor: _____		\$	\$
Other Direct Costs		\$	\$
Adjustments (Explain in 12.)		\$	\$
Total Costs (Less G&A)		\$	\$
G&A @ _____%		\$	\$
Total Costs (WITH G&A)		\$	\$
Fee @ _____% (If Any)		\$	\$
Total Costs and Fee		\$	\$
Credit (Explain in 12.)		\$	\$
Contractor's Share (If Any)		\$	\$
Government Share		\$	\$
11. CERTIFICATION STATEMENT: I certify that this invoice is correct and in accordance with the terms of the contract, that costs included herein have been incurred, represent payments made by the Contractor except as otherwise authorized in the payments provisions of the contract, and properly reflect the work performed.			
Typed Name and Title		Signature	Date
12. EXPLANATION (Continue on additional page(s) as needed.)			

PART III - SECTION J

ATTACHMENT D

List of Government Property - Contractor Acquired

[TBD]

PART III - SECTION J

ATTACHMENT E

List of Government-Furnished Property

[TBD]

PART III - SECTION J

ATTACHMENT F

Subcontract Plan \*

[TBD]

- \* MAY BE REQUIRED in accordance with Part III, Section I, FAR 52.219-9, Small Business, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan and DEAR 952.226-72, "Energy Policy Act Subcontracting Goals and Reporting Requirements".

PART IV  
SECTION K

REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF  
BIDDERS/OFFERORS

TABLE OF CONTENTS

<u>NO.</u>	<u>FAR #</u>	<u>TITLE</u>	<u>DATE</u>
K.1	52.203-11	Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions	APR 1991
K.2	52.204-5	Women-Owned Business	OCT 1995
K.3	52.222-21	Certification of Nonsegregated Facilities	APR 1984
K.4	52.204-3	Taxpayer Identification	MAR 1994
K.5	52.209-5	Certification Regarding Debarment, Suspension, Proposed Debarment, and Other Responsibility Matters	MAR 1996
K.6	52.215-6	Type of Business Organization	JUL 1987
K.7	52.215-11	Authorized Negotiators	APR 1984
K.8	52.215-19	Period for Acceptance of Offer	APR 1984
K.9	52.215-20	Place of Performance	APR 1984
K.10	52.219-1	Small Business Program Representations	JAN 1997
K.11	52.222-22	Previous Contracts and Compliance Reports	APR 1984
K.12	52.222-25	Affirmative Action Compliance	APR 1984
K.13	52.223-1	Clean Air and Water Certification	APR 1984
K.14	52.223-13	Certification of Toxic Chemical Release Reporting.	OCT 1996
K.15	52.227-15	Representation of Limited Rights Data and Restricted Computer Software	JUN 1987
K.16	52.230-1	Cost Accounting Standards Notices and Certification.	APR 1996
K.17	952.227-80	Technical Data Certification.	APR 1984
K.18	952.227-81	Royalty Payments Certification	APR 1984
K.19	52.226-2	Historically Black Colleges And Universities	MAY 1997
K.20	952.226-73	Energy Policy Act Target Group Certification	JUN 1996
K.21		Signature/Certification	

**SECTION K - REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS  
OR QUOTERS**

Various statutes and regulations require Federal agencies to obtain certain representations, certifications and other statements from bidders/offerors in connection with the award of contracts. To this end, all bidders/offerors submitting a bid/proposal in response to this solicitation must complete all certifications shown below.

**K.1 CERTIFICATION AND DISCLOSURE REGARDING PAYMENTS TO INFLUENCE CERTAIN  
FEDERAL TRANSACTIONS. (FAR 52.203-11, APR 1991)**

(a) The definitions and prohibitions contained in the clause, at FAR 52.203-12, Limitation on Payments to Influence Certain Federal Transactions, included in this solicitation, are hereby incorporated by reference in paragraph (b) of this certification.

(b) The offeror, by signing its offer, hereby certifies to the best of his or her knowledge and belief that on or after December 23, 1989:

(1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan, or cooperative agreement;

(2) If any funds other than Federal appropriated funds (including profit or fee received under a covered Federal transaction) have been paid, or will be paid, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress on his or her behalf in connection with this solicitation, the offeror shall complete and submit, with its offer, OMB standard form LLL, Disclosure of Lobbying Activities, to the Contracting Officer; and

(3) He or she will include the language of this certification in all subcontract awards at any tier and require that all recipients of subcontract awards in excess of \$100,000 shall certify and disclose accordingly.

(c) Submission of this certification and disclosure is a prerequisite for making or entering into this contract imposed by section 1352, title 31, United States Code. Any person who makes an expenditure prohibited under this provision or who fails to file or amend the disclosure form to be filed or amended by this provision, shall be subject to a civil penalty of not less than \$10,000, and not more than \$100,000, for each such failure.

**K.2 WOMEN-OWNED BUSINESS (FAR 52.204-5, OCT 1995)**

(a) *Representation.* The offeror represents that it ( ) is, ( ) is not a women-owned business concern.

(b) *Definition.* "Women-owned business concern," as used in this provision, means a concern which is at least 51 percent owned by one or more women; or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and whose management and daily business operations are controlled by one or more women.

K.3 CERTIFICATION OF NONSEGREGATED FACILITIES (FAR 52.222-21, APR 1984)

(a) "Segregated facilities," as used in this provision, means any waiting rooms, work areas, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin because of habit, local custom, or otherwise.

(b) By the submission of this offer, the offeror certifies that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The offeror agrees that a breach of this certification is a violation of the Equal Opportunity clause in the contract.

(c) The offeror further agrees that (except where it has obtained identical certifications from proposed subcontractors for specific time periods) it will:

- (1) Obtain identical certifications from proposed subcontractors before the award of subcontracts under which the subcontractor will be subject to the Equal Opportunity clause;
- (2) Retain the certifications in the files; and
- (3) Forward the following notice to the proposed subcontractors (except if the proposed subcontractors have submitted identical certifications for specific time periods):

NOTICE TO PROSPECTIVE SUBCONTRACTORS OF REQUIREMENT  
FOR CERTIFICATIONS OF NONSEGREGATED FACILITIES

A Certification of Nonsegregated Facilities must be submitted before the award of a subcontract under which the subcontractor will be subject to the Equal Opportunity clause. The certification may be submitted either for each subcontract or for all subcontracts during a period (i.e., quarterly, semiannually, or annually).

NOTE: The penalty for making false statements in offers is prescribed in 18 U.S.C. 1001.

K.4 TAXPAYER IDENTIFICATION. (FAR 52.204-3, MAR 1994)

(a) *Definitions.*

"Common parent," as used in this solicitation provision, means that corporate entity that owns or controls an affiliated group of corporations that files its Federal income tax returns on a consolidated basis, and of which the offeror is a member.

"Corporate status," as used in this solicitation provision, means a designation as to whether the offeror is a corporate entity, an unincorporated entity (e.g., sole proprietorship or partnership), or a corporation providing medical and health care services.

"Taxpayer Identification Number (TIN)," as used in this solicitation provision, means the number required by the IRS to be used by the offeror in reporting income tax and other returns.

(b) All offerors are required to submit the information required in paragraphs (c) through (e) of this solicitation provision in order to comply with reporting requirements of 26 U.S.C. 6041, 6041A, and

6050M and implementing regulations issued by the Internal Revenue Service (IRS). If the resulting contract is subject to reporting requirements described in FAR 4.903, the failure or refusal by the offeror to furnish the information may result in a 31 percent reduction of payments otherwise due under the contract.

(c) *Taxpayer Identification Number (TIN).*

☐ TIN: \_\_\_\_\_.

☐ TIN has been applied for.

☐ TIN is not required because:

☐ Offeror is a nonresident alien, foreign corporation, or foreign partnership that does not have income effectively connected with the conduct of a trade or business in the U.S. and does not have an office or place of business or a fiscal paying agent in the U.S.;

☐ Offeror is an agency or instrumentality of a foreign government;

☐ Offeror is an agency or instrumentality of a Federal, state or local government;

☐ Other. State basis. \_\_\_\_\_

(d) *Corporate Status.*

☐ Corporation providing medical and health care services, or engaged in the billing and collecting of payments for such services;

☐ Other corporate entity;

☐ Not a corporate entity;

☐ Sole proprietorship

☐ Partnership

☐ Hospital or extended care facility described in 26 CFR 501(c)(3) that is exempt from taxation under 26 CFR 501(a).

(e) *Common Parent.*

☐ Offeror is not owned or controlled by a common parent as defined in paragraph (a) of this clause.

☐ Name and TIN of common parent:

Name \_\_\_\_\_

TIN \_\_\_\_\_



K.5 CERTIFICATION REGARDING DEBARMENT, SUSPENSION, PROPOSED DEBARMENT, AND OTHER RESPONSIBILITY MATTERS (FAR, MAR 1996)

(a) The Offeror certifies:

(1) to the best of its knowledge and belief, that:

(i) The Offeror and/or any of its Principals:

(A) Are ( ) are not ( ) presently debarred, suspended, proposed for debarment, or declared ineligible for the award of contracts by any Federal agency;

(B) Have ( ) have not ( ), within a 3-year period preceding this offer, been convicted of or had a civil judgment rendered against them for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) contract or subcontract; violation of Federal or state antitrust statutes relating to the submission of offers; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, tax evasion, or receiving stolen property; and

(C) Are ( ) are not ( ) presently indicted for, or otherwise criminally or civilly charged by a governmental entity with, commission of any of the offenses enumerated in subdivision (a)(1)(i)(B) of this provision.

(ii) The Offeror has ( ) has not ( ), within a 3-year period preceding this offer, had one or more contracts terminated for default by any Federal agency.

(2) "Principals," for the purposes of this certification, means officers; directors; owners; partners; and, persons having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a subsidiary, division, or business segment, and similar positions).

This certification concerns a matter within the jurisdiction of an agency of the United States and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under section 1001, title 18, United States Code.

(b) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

(c) A certification that any of the items in paragraph (a) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, the certification will be considered in connection with a determination of the Offeror's responsibility. Failure of the Offeror to furnish a certification or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

(d) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by paragraph (a) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.



K.10 SMALL BUSINESS PROGRAM REPRESENTATIONS (FAR 52.219-1, JAN 1997)

- (a)
  - (1) The standard industrial classification (SIC) code for this acquisition is 8731.
  - (2) The small business size standard is 500.
  - (3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.
- (b) *Representations.*
  - (1) The offeror represents and certifies as part of its offer that it ( ) is, ( ) is not a small business concern.
  - (2) (Complete only if offeror represented itself as a small business concern in block (b)(1) of this section.) The offeror represents as part of its offer that it ( ) is, ( ) is not a small disadvantaged business concern.
  - (3) (Complete only if offeror represented itself as a small business concern in block (b)(1) of this section.) The offeror represents as part of its offer that it ( ) is, ( ) is not a women-owned small business concern.
- (c) *Definitions.*

*Joint venture*, for purposes of a small disadvantaged business (SDB) set-aside or price evaluation preference (as prescribed at 13 CFR 124.321), is a concern that is owned and controlled by one or more socially and economically disadvantaged individuals entering into a joint venture agreement with one or more business concerns and is considered to be affiliated for size purposes with such other concern(s). The combined annual receipts or employees of the concerns entering into the joint venture must meet the applicable size standard corresponding to the SIC code designated for the contract. The majority of the venture's earnings must accrue directly to the socially and economically disadvantaged individuals in the SDB concern(s) in the joint venture. The percentage of the ownership involvement in a joint venture by disadvantaged individuals must be at least 51 percent.

*Small business concern*, as used in this provision, means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and the size standard in paragraph (a) of this provision.

*Small disadvantaged business concern*, as used in this provision, means a small business concern that (1) is at least 51 percent unconditionally owned by one or more individuals who are both socially and economically disadvantaged, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more socially and economically disadvantaged individuals, and (2) has its management and daily business controlled by one or more such individuals. This term also means a small business concern that is at least 51 percent unconditionally owned by an economically disadvantaged Indian tribe or Native Hawaiian Organization, or a publicly owned business having at least 51 percent of its stock unconditionally owned by one or more of these entities, which has its management and daily business controlled by members of an economically disadvantaged Indian tribe or Native Hawaiian Organization, and which meets the requirements of 13 CFR Part 124.

*Women-owned small business concern*, as used in this provision, means a small business concern--

(1) Which is at least 51 percent owned by one or more women or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

(d) *Notice.*

(1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.

(2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a small or small disadvantaged business concern in order to obtain a contract to be awarded under the preference programs established pursuant to sections 8(a), 8(d), 9, or 15 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall--

(i) Be punished by imposition of fine, imprisonment, or both;

(ii) Be subject to administrative remedies, including suspension and debarment; and

(iii) Be ineligible for participation in programs conducted under the authority of the Act.

K.11 PREVIOUS CONTRACTS AND COMPLIANCE REPORTS (FAR 52.222-22, APR 1984)

The offeror represents that:

(a) It ( ) has, ( ) has not participated in a previous contract or subcontract subject either to the Equal Opportunity clause of this solicitation, the clause originally contained in Section 310 of Executive Order No. 10925, or the clause contained in Section 201 of Executive Order No. 11114;

(b) It ( ) has, ( ) has not, filed all required compliance reports; and

(c) Representations indicating submission of required compliance reports, signed by proposed subcontractors, will be obtained before subcontract awards.

K.12 AFFIRMATIVE ACTION COMPLIANCE (FAR 52.222-25, APR 1984)

The offeror represents that:

(a) It ( ) has developed and has on file, ( ) has not developed and does not have on file, at each establishment, affirmative action programs required by the rules and regulations of the Secretary of Labor (41 CFR 60-1 and 60-2); or

(b) it ( ) has not previously had contracts subject to the written affirmative action programs requirement of the rules and regulations of the Secretary of Labor.

K.13 CLEAN AIR AND WATER CERTIFICATION (FAR 52.223-1, APR 1984)

The Offeror certifies that:

- (a) Any facility to be used in the performance of this proposed contract is (    ), is not (    ) listed on the Environmental Protection Agency (EPA) List of Violating Facilities;
- (b) The Offeror will immediately notify the Contracting Officer, before award, of the receipt of any communication from the Administrator, or a designee, of the EPA, indicating that any facility that the Offeror proposes to use for the performance of the contract is under consideration to be listed on the EPA List of Violating Facilities; and
- (c) The Offeror will include a certification substantially the same as this certification, including this paragraph (c), in every nonexempt subcontract.

K.14 CERTIFICATION OF TOXIC CHEMICAL RELEASE REPORTING (FAR 52.223-13, OCT 1996)

(a) Submission of this certification is a prerequisite for making or entering into this contract imposed by Executive Order 12969, August 8, 1995.

(b) By signing this offer, the offeror certifies that--

(1) As the owner or operator of facilities that will be used in the performance of this contract that are subject to the filing and reporting requirements described in section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 (EPCRA) (42 U.S.C. 11023) and section 6607 of the Pollution Prevention Act of 1990 (PPA) (42 U.S.C. 13106), the offeror will file and continue to file for such facilities for the life of the contract the Toxic Chemical Release Inventory Form (Form R) as described in sections 313(a) and (g) of EPCRA and section 6607 of PPA; or--

(2) None of its owned or operated facilities to be used in the performance of this contract is subject to the Form R filing and reporting requirements because each such facility is exempt for at least one of the following reasons: (Check each block that is applicable.)

(i) The facility does not manufacture, process, or otherwise use any toxic chemicals listed under section 313(c) of EPCRA, 42 U.S.C. 11023(c);

(ii) The facility does not have 10 or more full-time employees as specified in section 313(b)(1)(A) of EPCRA, 42 U.S.C. 11023(b)(1)(A);

(iii) The facility does not meet the reporting thresholds of toxic chemicals established under section 313(f) of EPCRA, 42 U.S.C. 11023(f) (including the alternate thresholds at 40 CFR 372.27, provided an appropriate certification form has been filed with EPA);

(iv) The facility does not fall within Standard Industrial Classification Code (SIC) designations 20 through 39 as set forth in Section 19.102 of the Federal Acquisition Regulation; or

(v) The facility is not located within any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, or any other territory or possession over which the United States has jurisdiction.

K.15 REPRESENTATION OF LIMITED RIGHTS DATA AND RESTRICTED COMPUTER SOFTWARE.  
(FAR 52.227-15, JUN 1987)

(a) This solicitation sets forth the work to be performed if a contract award results, and the Government's known delivery requirements for data (as defined in FAR 27.401). Any resulting contract may also provide the Government the option to order additional data under the Additional Data Requirements clause at 52.227-16 of the FAR, if included in the contract. Any data delivered under the resulting contract will be subject to the Rights in Data - General clause at 52.227-14 that is to be included in this contract. Under the latter clause, a Contractor may withhold from delivery data that qualify as limited rights data or restricted computer software, and deliver form, fit, and function data in lieu thereof. The latter clause also may be used with its *Alternates II* and/or *III* to obtain delivery of limited rights data or restricted computer software, marked with limited rights or restricted rights notices, as appropriate. In addition, use of *Alternate V* with this latter clause provides the Government the right to inspect such data at the Contractor's facility.

(b) As an aid in determining the Government's need to include any of the aforementioned *Alternates* in the clause at 52.227-14, Rights in Data - General, the offeror's response to this solicitation shall, to the extent feasible, complete the representation in paragraph (b) of this provision to either state that none of the data qualify as limited rights data or restricted computer software, or identify which of the data qualifies as limited rights data or restricted computer software. Any identification of limited rights data or restricted computer software in the offeror's response is not determinative of the status of such data should a contract be awarded to the offeror.

REPRESENTATION CONCERNING DATA RIGHTS

Offeror has reviewed the requirements for the delivery of data or software and states  
(offeror check appropriate block) -

( ) None of the data proposed for fulfilling such requirements qualifies as limited rights data or restricted computer software.

( ) Data proposed for fulfilling such requirements qualify as limited rights data or restricted computer software and are identified as follows:

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Note: "Limited rights data" and "Restricted computer software" are defined in the contract clause entitled "Rights In Data - General."

K.16 COST ACCOUNTING STANDARDS NOTICES AND CERTIFICATION (FAR 52.230-1, APR 1996)

Note: **This notice does not apply to small businesses or foreign governments.** This notice is in three parts, identified by Roman numerals I through III. If the offeror is an educational institution, Part II does not apply unless the contemplated contract will be subject to full or modified CAS coverage pursuant to 48 CFR 9903.201-2(c)(5) or 9903.201-2(c)(6), respectively.

I. Disclosure Statement - Cost Accounting Practices and Certification

(a) Any contract in excess of \$500,000 resulting from this solicitation, except contracts in which the price negotiated is based on (1) established catalog or market prices of commercial items sold in substantial quantities to the general public, or (2) prices set by law or regulation, will be subject to the requirements of The Cost Accounting Standards Board (48 CFR Chapter 99), except for those contracts which are exempt as specified in 48 CFR 9903.201-1.

(b) Any offeror submitting a proposal which, if accepted, will result in a contract subject to the requirements of 48 CFR Chapter 99 must, as a condition of contracting, submit a Disclosure Statement as required by 48 CFR 9903.202. When required, the Disclosure Statement must be submitted as a part of the offeror's proposal under this solicitation unless the offeror has already submitted a Disclosure Statement disclosing the practices used in connection with the pricing of this proposal. If an applicable Disclosure Statement has already been submitted, the offeror may satisfy the requirement for submission by providing the information requested in paragraph (c) of Part I of this provision.

CAUTION: In the absence of specific regulations or agreement, a practice disclosed in a Disclosure Statement shall not, by virtue of such disclosure, be deemed to be a proper, approved, or agreed-to-practice for pricing proposals or accumulating and reporting contract performance cost data.

(c) Check the appropriate box below:

( ) (1) *Certificate of Concurrent Submission of Disclosure Statement.*

The offeror hereby certifies that, as a part of the offer, copies of the Disclosure Statement have been submitted as follows: (i) original and one copy to the cognizant Administrative Contracting Officer (ACO), or cognizant Federal agency official authorized to act in that capacity (Federal official), as applicable, and (ii) one copy to the cognizant Federal auditor.

(Disclosure must be on Form No. CASB DS-1 or CASB-DS-2, as applicable. Forms may be obtained from the cognizant ACO or Federal official and/or from the loose-leaf version of the Federal Acquisition Regulation.)

Date of Disclosure Statement:

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Name and Address of Cognizant ACO or Federal Official Where Filed:

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The offeror further certifies that the practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices disclosed in the Disclosure Statement.

( ) (2) *Certificate of Previously Submitted Disclosure Statement.*

The offeror hereby certifies that the required Disclosure Statement was filed as follows:

Date of Disclosure Statement:

---

Name and Address of Cognizant ACO or Federal Official Where Filed:

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The offeror further certifies that the practices used in estimating costs in pricing this proposal are consistent with the cost accounting practices disclosed in the applicable Disclosure Statement.

( ) (3) *Certificate of Monetary Exemption.*

The offeror hereby certifies that the offeror, together with all divisions, subsidiaries, and affiliates under common control, did not receive net awards of negotiated prime contracts and subcontracts subject to CAS totaling more than \$25 million (of which at least one award exceeded \$1 million) in the cost accounting period immediately preceding the period in which this proposal was submitted. The offeror further certifies that if such status changes before an award resulting from this proposal, the offeror will advise the Contracting Officer immediately.

( ) (4) *Certificate of Interim Exemption.*

The offeror hereby certifies that (i) the offeror first exceeded the monetary exemption for disclosure, as defined in (3) of this subsection, in the cost accounting period immediately preceding the period in which this offer was submitted and (ii) in accordance with 48 CFR 9903.202-1, the offeror is not yet required to submit a Disclosure Statement. The offeror further certifies that if an award resulting from this proposal has not been made within 90 days after the end of that period, the offeror will immediately submit a revised certificate to the Contracting Officer, in the form specified under subparagraph (c)(1) or (c)(2) of Part I of this provision, as appropriate, to verify submission of a completed Disclosure Statement.

CAUTION: Offerors currently required to disclose because they were awarded a CAS-covered prime contract or subcontract of \$25 million or more in the current cost accounting period may not claim this exemption (4). Further, the exemption applies only in connection with proposals submitted before expiration of the 90-day period following the cost accounting period in which the monetary exemption was exceeded.

## II. Cost Accounting Standards - Eligibility for Modified Contract Coverage

If the offeror is eligible to use the modified provisions of 48 CFR 9903.201-2(b) and elects to do so, the offeror shall indicate by checking the box below. Checking the box below shall mean that the resultant contract is subject to the Disclosure and Consistency of Cost Accounting Practices clause in lieu of the Cost Accounting Standards clause.

( ) The offeror hereby claims an exemption from the Cost Accounting Standards clause under the provisions of 48 CFR 9903.201-2(b) and certifies that the offeror is eligible for use of the Disclosure



and Consistency of Cost Accounting Practices clause because during the cost accounting period immediately preceding the period in which this proposal was submitted, the offeror received less than \$25 million in awards of CAS-covered prime contracts and subcontracts, or the offeror did not receive a single CAS-covered award exceeding \$1 million. The offeror further certifies that if such status changes before an award resulting from this proposal, the offeror will advise the Contracting Officer immediately.

CAUTION: An offeror may not claim the above eligibility for modified contract coverage if this proposal is expected to result in the award of a CAS-covered contract of \$25 million or more or if, during its current cost accounting period, the offeror has been awarded a single CAS-covered prime contract or subcontract of \$25 million or more.

### III. Additional Cost Accounting Standards Applicable to Existing Contracts.

The offeror shall indicate below whether award of the contemplated contract would, in accordance with subparagraph (a)(3) of the Cost Accounting Standards clause, require a change in established cost accounting practices affecting existing contracts and subcontracts.

( ) Yes ( ) No.

#### K.17 TECHNICAL DATA CERTIFICATION (DEAR 952.227-80, APR 1984)

(a) The offeror certifies that it has not delivered or is not obligated to deliver to the Government under any contract or subcontract the same or substantially the same technical data included in its offer, except as set forth below:

( ) none

( ) Contract No. (and Subcontract No., if applicable)

Agency name and place of delivery

(b) The work to be performed and the known requirements for technical data as set forth in the solicitation have been reviewed. To the best of my knowledge:

( ) There will be no technical data withheld from delivery as being proprietary data.

( ) The technical data listed on page \_\_\_\_\_ of the proposal will likely be used in conjunction with the performance of work under the contract and is represented as being proprietary data to be protected from unauthorized use and disclosure and therefore to be withheld from delivery in a report not having a restrictive legend.

#### K.18 ROYALTY PAYMENTS CERTIFICATION. (DEAR 952.227-81, APR 1984)

In order that DOE may be informed regarding royalty payments to be made by a contractor in connection with any acquisition, construction, or operation where the amount of the royalty payment is reflected in the contract price, or is to be reimbursed by the Government, check one of the following:

( ) The Contract price includes no amount representing the payment of royalty by the offeror directly to others in connection with the performance of the contract.

( ) The contract price includes an amount for royalty payment expected to be made in connection with the proposed award. The Offeror shall set forth below:

(1) the amount of each payment,

(2) the names of the licensor,

(3) either the patent numbers involved or such other information as will permit identification of the patents and patent applications and the basis on which royalties will be paid.

K.19 HISTORICALLY BLACK COLLEGE OR UNIVERSITY AND MINORITY INSTITUTION REPRESENTATION (MAY 1997)

(a) Definitions. As used in this provision--Historically Black College or University means an institution determined by the Secretary of Education to meet the requirements of 34 CFR 608.2. For the Department of Defense, the National Aeronautics and Space Administration, and the Coast Guard, the term also includes any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

Minority Institution means an institution of higher education meeting the requirements of Section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1135d-5(3)) which, for the purpose of this provision, includes a Hispanic-serving institution of higher education as defined in Section 316(b)(1) of the Act (20 U.S.C. 1059c(b)(1)).

(b) Representation. The offeror represents that it--

( ) is ( ) is not a Historically Black College or University;

( ) is ( ) is not a Minority Institution.

K.20 952.226-73 — ENERGY POLICY ACT TARGET GROUP CERTIFICATION (JUN 1996)

(a) *Certification.* The offeror certifies that it is:

(1) ( ) An institution of higher education that meets the requirements of 34 CFR 600.4(a), and has a student enrollment that consists of at least 20 percent:

(i) Hispanic Americans, i.e., students whose origins are in Mexico, Puerto Rico, Cuba, or Central or South America, or any combination thereof, or

(ii) Native Americans, i.e., American Indians, Eskimos, Aleuts, and Native Hawaiians, or any combination thereof;

(2) ( ) An institution of higher learning determined to be a Historically Black College and University by the Secretary of Education pursuant to 34 CFR 608.2; or

(3) ( ) A small business concern, as defined under section 3 of the Small Business Act (15 U.S.C. 632), that is owned and controlled by individuals who are both socially and economically disadvantaged within the meaning of section 8(d) of the Small Business Act (15 U.S.C. 637(d)) or by a woman or women.

(b) By submission of an offer, the offeror agrees to provide to the Contracting Officer, upon request, evidence satisfactory to the contracting officer that the offeror is an entity from the Energy Policy Act target group identified.

## K.21 SIGNATURE/CERTIFICATION

By signing below, the bidder/offeror certifies, under penalty of law, that the representations and certifications are accurate, current, and complete. The bidder/offeror further certifies that it will notify the Contracting Officer of any changes to these representations and certifications. The representations and certifications made by the bidder/offeror, as contained herein, concern matters within the jurisdiction of an agency of the United States and the making of a false, fictitious, or fraudulent representation or certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

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Date of Execution

---

Signature of the Officer or Employee  
Responsible for the Bid/Offer

---

Typed Name and Title of the Officer or  
Employee Responsible for the Bid/Offer

---

Name of Organization

---

Street

---

City

---

State/Zip Code

---

Solicitation Number

PART V - SECTION L  
INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS

L.1 GENERAL

The model contract (Sections A through K) contains terms and conditions pertinent to this solicitation and the anticipated award document. Offerors should carefully review the information contained therein, and, as appropriate, state any proposed exceptions/deviations per the proposal preparation instructions given in Section L.13.

- (a) Eligibility. All responsible individuals, corporations, non-profit organizations, educational institutions, and state or local governments may submit proposals for consideration.

Proposals which include performance at any level by DOE Management & Operating (M&O) Contractors are inappropriate for this competition and shall be determined ineligible for award.

Federal entities and agents who can use the Economy Act or DOE Field Task Proposal Agreements System shall submit proposals outside the PRDA process for consideration by DOE officials.

- (b) Cost-Sharing. The DOE anticipates making multiple awards via cost-sharing contract(s). The offeror must cost share at least 20 percent of the total allowable project cost. For example, if the total cost is \$100,000, the participant must share at least \$20,000 and DOE's share will be no more than \$80,000.
- (c) Level of Effort. It is expected that the effort needed for each project will range up to 250K per year, per contract, depending upon the level of effort (refer to Part III, Section J, Attachment A) being proposed.

L.2 SOLICITATION DEFINITIONS (FAR 52.215-5, JUL 1987)

"Offer" means "proposal" in negotiation.

"Solicitation" means a request for proposals (RFP) or a request for quotations (RFQ) in negotiation.

"Government" means United States Government.

L.3 AMENDMENTS TO SOLICITATIONS (FAR 52.215-8, DEC 1989)

- (a) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.
- (b) Offerors shall acknowledge receipt of any amendments to this solicitation by (1) signing and returning the amendment, (2) identifying the amendment number and date in the space provided for this purpose on the form for submitting an offer, (3) by letter or telegram, or (4) facsimile, if facsimile offers are authorized in the solicitation. The Government must receive the acknowledgement by the time specified for receipt of offers.

NOTE that amendments will be posted on the World Wide Web FETC-Home Page at: "<http://www.fetc.doe.gov>" (select "business"). The Offeror is advised to periodically check the FETC Home Page for any amendments.

L.4 RESERVED

L.5 RESERVED

L.6 RESERVED

L.7 INTENTION TO PROPOSE

Please review this solicitation and complete the information in Appendix I, Intent to Propose, and mail, fax or e-mail your response by the earliest practical date to the address shown on the form.

L.8 EXPLANATION TO PROSPECTIVE OFFERORS (FAR 52.215-14, APR 1984)

Any prospective offeror desiring an explanation or interpretation of the solicitation, drawings, specifications, etc., must request it in writing soon enough to allow a reply to reach all prospective offerors before the submission of their offers. Oral explanations or instructions given before the award of the contract will not be binding. Any information given to a prospective offeror concerning a solicitation will be furnished promptly to all other prospective offerors as an amendment of the solicitation, if that information is necessary in submitting offers or if lack of it would be prejudicial to any other prospective offerors.

L.9 INQUIRIES

All communications or questions regarding this PRDA must be written, must reference solicitation no. DE-RA26-97BC15029, and must be directed to the ATTENTION of DONA G. SHEEHAN through one of the following methods: (1) via

mail sent to: U.S. Department of Energy, Federal Energy Technology Center, Acquisition and Assistance Division, P.O. Box 10940, MS 921-143, Pittsburgh, Pennsylvania 15236, or (2) via facsimile (fax), 412/892-6216 (3) via e-mail, sheehan@fetc.doe.gov.

L.10 RESERVED

L.11 CLASSIFIED MATERIAL

Performance under the proposed contract is not anticipated to involve access to classified material.

L.12 RESERVED

L.13 PROPOSAL PREPARATION INSTRUCTIONS

L.13(a) GENERAL

L.13(a)(1) OVERALL ARRANGEMENT OF PROPOSAL.

To facilitate orderly and expedient review of proposals submitted in response to this PRDA, the proposals are to be prepared in the format according to instructions enumerated herein. Each proposal is to consist of four (4) separately bound volumes entitled respectively: Volume I - Offer and Other Documents; Volume II - Technical Proposal; Volume III - Cost Proposal; and Volume IV - Environmental Proposal. A Proposal Cover Sheet (Appendix II) must be attached to each volume. The recommended page size is 8-1/2 inches by 11 inches; typing should be double spaced. Printing on both sides of a sheet is encouraged.

The overall proposal shall consist of four physically separated volumes, individually entitled as stated below. The required number of each proposal volume is also shown in the matrix below.

PROPOSAL VOLUME - TITLE	TOTAL NO. REQUIRED	GROUP I (ORIGINAL DOCUMENTS & SIGNATURES)	GROUP II (COPIES)
I OFFER AND OTHER DOCUMENTS	4	1 signed original	3 copies
II TECHNICAL	8	1 signed original	7 copies
III COST	4	1 signed original	3 copies
IV ENVIRONMENTAL	4	1 signed original	3 copies

A proposal may not address more than one approach to a specific topic.

Packaging: The proposals shall be submitted in two groups. Group No. 1 of each proposal shall contain the signed original of all documents requiring signature by the offeror. Group 2 of each proposal shall consist of all required copies; use of reproductions of signed originals is authorized in all copies of the proposal. Each group is to be packaged individually. This does not preclude packaging more than one, or all groups in a single overall package. Mark the group number on the outside of the individual packages. External markings and place for submission of proposals is designated in L.14.

L.13(a)(2) UNNECESSARILY ELABORATE PROPOSALS OR QUOTATIONS  
(FAR 52.215-7, APR 1984)

Unnecessarily elaborate brochures or other presentations beyond those sufficient to present a complete and effective response to this solicitation are not desired and may be construed as an indication of the offeror's or quoter's lack of cost consciousness. Elaborate art work, expensive paper and bindings, and expensive visual and other presentation aids are neither necessary nor wanted.

L.13(a)(3) FALSE STATEMENTS

Proposals must set forth full, accurate, and complete information as required by this solicitation (including attachments). The penalty for making false statements in proposals is prescribed in 18 U.S.C. 1001.

L.13(a)(4) RIGHTS IN TECHNICAL DATA SOLICITATION INSTRUCTION  
(DEAR 952.227-83, APR 1984)

The section of this solicitation which describes the work to be performed also sets forth DOE's known requirements for technical data. The Additional Technical Data Requirements clause (FAR 52.227-16), if included in this solicitation, provides the Government with the option to order additional technical data, the requirements for which are not known at the time of contracting. There is, however, a built-in limitation on the kind of technical data which may be required. This limitation provides that the contractor may withhold delivery of proprietary data. Accordingly, it is necessary that your proposal state that the work to be performed and the known requirements for technical data as set forth in the solicitation have been reviewed, and either state that, to the best of your knowledge, no data will be withheld, or submit a list identifying the proprietary data which, to the best of your knowledge, will likely be used in the contract performance and will be withheld.

L.13(a)(5) RESTRICTION ON DISCLOSURE AND USE OF DATA (FAR 52.215-12, APR 1984)

Offerors or quoters who include in their proposals or quotations data that they do not want disclosed to the public for any purpose or used by the Government except for evaluation purposes, shall:

(a) Mark the title page with the following legend:

"This proposal or quotation includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed--in whole or in part-- for any purpose other than to evaluate this proposal or quotation. If, however, a contract is awarded to this offeror or quoter as a result of, or in connection with, the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets (insert numbers or other identification of sheets)"; and

(b) Mark each sheet of data it wishes to restrict with the following legend:

"Use or disclosure of data contained on this sheet is subject to the restriction on the title page of this proposal or quotation."

L.13(a)(6) EXPENSES RELATED TO PROPOSAL OR BID SUBMISSIONS

This solicitation does not commit the Government to pay any costs incurred in the submission of any proposal or bid, or in making necessary studies or designs for the preparation thereof or to acquire or contract for any services.

L.13(a)(7) OFFER ACCEPTANCE PERIOD

The minimum offer acceptance period is 180 days after the required date for receipt of proposals.

L.13(b) PREPARATION INSTRUCTIONS: VOLUME I - OFFER AND OTHER DOCUMENTS

L.13(b)(1) Volume I - Offer and Other Documents addresses the business management aspects of the procurement. Since Volume I - Offer and Other Documents,



will be evaluated to determine the offeror's potential for completing the required work, it should be specific and complete.

At a minimum, Volume I - Offer and Other Documents shall contain the information specified below in accordance with the following format:

- (i) Cover Sheet: A completed and signed cover sheet in the format shown in Appendix II shall be used.
- (ii) Table of Contents: Proposals shall include table of contents to facilitate locating the elements of the proposal. All exhibits to Volume I should also be identified.
- (iii) Acknowledgement of Amendments to Solicitation, if any.
- (iv) Supporting Data: The supporting data to be included in the Business and Management Proposal shall include all of the following information:
  - A. The suitability of proposed teaming agreements among participants (including subcontractors).
  - B. A discussion of the project management system among participants (including subcontractors), if applicable, including detailed plans for the (1) coordination and management of their respective individual activities, (2) proposed organizational interfaces, and (3) intended lines of authority.
  - C. A current certified financial statement for each member of the offeror's team shall be included in the proposal.
  - D. A discussion of the proposed involvement of qualified and capable small and small socially and economically disadvantaged business concerns. In addition, address the extent to which consideration has been given for subcontracting opportunities to entities from among the Energy Policy Act target groups, i.e., (1) small business concerns controlled by socially and economically disadvantaged individuals or by women; or (2) Historically Black colleges and universities; or (3) colleges and universities having a student body in which more than twenty (20) percent of the students are Hispanic Americans or Native Americans (as implemented by DEAR 926.7001). This section shall also contain the offerors commitment to, on request, submit and negotiate in

good faith a Small Business and Small Disadvantaged Business Subcontracting Plan in accordance with contract clause I.27 (FAR 52.219-9), and clause I.99 (DEAR 952.226-70) of this solicitation.

(v) Additional information to be provided:

- A. Certification of Proposal Commitment: The official(s) submitting the proposal must certify that they are authorized to submit the proposal on behalf of the offeror and all members of its proposed team.
- B. Period of Proposal Validity: The proposer must certify that the period for which the proposal is valid and is not less than 180 days after the closing date for receipt of proposals as specified in the solicitation (see provision L.13(a)(7)).
- C. Contractor Identification Number--Data Universal Numbering System (DUNS) Number (FAR 52.204-6, DEC 1996)

Contractor Identification Number means "Data Universal Numbering System (DUNS) number," which is a nine-digit number assigned by Dun and Bradstreet Information Services. Contractor identification is essential for complying with statutory contract reporting requirements. Therefore, the offeror is requested to provide "DUNS" number which identifies the offeror's name and address exactly as stated in the offer.

If the offeror does not have a DUNS number, it should contact Dun and Bradstreet directly to obtain one. A DUNS number will be provided immediately by telephone at no charge to the offeror. For information on obtaining a DUNS number, the offeror should call Dun and Bradstreet at 1-800-333-0505.

Offerors located outside the United States may obtain the location and phone number of the local Dun and Bradstreet Information Services office from the Internet at: <http://www.dbisna.com/dbis/customer/custlist.htm>. If an offeror is unable to locate a local service center, it may send an e-mail to Dun and Bradstreet at [globalinfo@dbisma.com](mailto:globalinfo@dbisma.com).

- D. Point(s) of Contact: The name(s), telephone number(s), facsimile (fax) numbers, and e-mail address(es), as appropriate, of the proposer's primary business and technical

personnel whom DOE may contact during evaluation or negotiation shall be provided under this section.

- E. Representations, Certifications and Other Statements: Part IV, Section K, Representations, Certifications and Other Statements of Bidders/Offerors must be executed by an authorized official of the submitting organization and included in Volume I - Offer and Other Documents. Executed Representations/Certifications shall also be provided for each proposed team member/subcontractor.
- F. Exceptions to Contract Terms and Conditions: The offeror should review the model contract (Sections A through K of this solicitation) provided herein and delineate any exceptions thereto; if there are no exceptions, it should be so stated.
- G. Government Furnished Property:
  - (1) Unless otherwise stated, the offeror is expected to furnish all property (including, but not limited to facilities, equipments, special tooling, and material) necessary for the performance of the work defined in the solicitation. Government property as used herein means all Government- furnished property, together with all property acquired by the Contractor, title which vests in the Government.
  - (2) Indicate in Volume I whether or not the proposal is based on the use of Government property. If the offeror proposes to use Government property to perform the work (whether or not such property is presently in the possession of the offeror), provide the particulars in a separate attachment to the Cost Proposal volume, along with a statement signed by an executive corporate official (or the equivalent in a noncorporate entity) which:
    - (a) Expresses the offeror's unwillingness or financial inability to acquire the necessary property with the offeror's resources; or
    - (b) Explains that time will not allow the offeror to make the necessary arrangements to obtain timely delivery of such property to meet the

Government's requirements even though the offeror is willing and financially able to acquire the property. Such an explanation is to include cost benefit studies that treat lease versus buy versus use of the Government property. In this case existing Government property, if available, may be provided until the property acquired by the offeror is delivered, installed, etc.

- (3) In the event that the offeror proposes to use Government-furnished property to perform the work, the Government shall include in its evaluation of the proposal the cost of providing Government-furnished property including acquisition, transportation, installation, removal and disposition.
- (4) If the offeror intends to fabricate or purchase any equipment for the performance of the work herein, the offeror shall identify these costs and equipment in the Cost Proposal volume. In addition, a separate attachment to the Cost Proposal volume shall list this equipment by the following categories:
  - (a) Non-Expendable Property - Item of Personal Property of any kind that is tangible and has a useful life of more than 1 year.
  - (b) Materials/Supplies - All property other than non-expendable property which may be consumed or expended in normal use.
- (5) Notwithstanding the above, the Government reserves the right under any resulting contract to furnish items of equipment, materials, supplies or facilities.

If there is no Government-furnished property required, it should be so stated.

**L.13(c) PREPARATION INSTRUCTIONS: VOLUME II -TECHNICAL PROPOSAL-  
LIMITED TO SIXTY PAGES**

Volume II - Technical Proposal, will be used to assess both the scientific merit of the proposed work and its relevance to both DOE's current programmatic objectives and the objectives of this Program Research and Development Announcement

(PRDA) [see Part I, Section J, Attachment A, Program Area of Interest]. The technical proposal must be self-contained and written in a clear and concise manner. The proposal shall be definitive with respect to the research which the offeror actually proposes to conduct. If the proposal is selected for comprehensive evaluation, the criteria specified in Section M shall be applied.

The maximum number of pages for the Technical Proposal shall be limited to **60** 8 ½ x 11 single-sided sheets or **30** double-sided sheets, typed double-spaced, with a font-size of no less than 10 pts. The page count shall exclude the front and back cover, Cover Sheet, Public Abstract, Table of Contents, Resumes, Appendixes and Attachments.

### **Criterion**

<b>Criterion</b>	<b>I:</b>	<b>Technical Approach</b>
	<b>I.A.:</b>	<b>Understanding of the Technical Issues.</b>
	<b>I.B.:</b>	<b>Adequacy and suitability of project organization.</b>
	<b>I.C.:</b>	<b>Completeness, Thoroughness, Rationale, and Uniqueness of the Proposed Technical Approach (Statement of Work)</b>
<b>Criterion</b>	<b>II:</b>	<b>Key Personnel qualifications, experience, and availability</b>
	<b>II.A.:</b>	<b>Technical Experience of Key Personnel</b>
	<b>II.B.:</b>	<b>Availability of Key Personnel to conduct, supervise, and guide the research project.</b>
	<b>II.C.:</b>	<b>An organizational structure that encourages group interaction and fosters an interdisciplinary “team” approach toward the research effort.</b>
<b>Criterion</b>	<b>III:</b>	<b>Corporate Experience, Past Performance and Institutional Facilities</b>
	<b>III.A.:</b>	<b>Experience and performance in similar research efforts through interdisciplinary team dynamics.</b>
	<b>III.B.:</b>	<b>Project organization and management.</b>

**III.C.: Adequacy of the corporate/institutional equipment and facilities necessary to accomplish the proposed research.**

To ensure that the technical proposal is evaluated strictly on its own merit, no cost information shall be included.

**L.13(c)(1) Format and Content**

Volume II - Technical Proposal is to be composed of the following elements in the order designated below:

**(i) Cover Sheet**

A completed and signed cover sheet in the format attached (Appendix II) shall be used. The title of the proposed effort should be concise and descriptive of the work to be performed.

**(ii) Public Abstract**

A concise abstract of no more than 500 words describing the objective(s), methodology, sponsoring organization(s), and time frame must be provided. The abstract is to provide an overview of the proposed project objectives. This abstract may be released to the public by the DOE in whole or in part at anytime. It is therefore required that no proprietary data or confidential business information be included (see Appendix III for recommended format of Public Abstract).

**(iii) Table of Contents**

Proposals shall include a table of contents to facilitate locating the elements of the proposal.

**(iv) Technical Discussion**

This section shall contain the major portion of the Technical Proposal. It shall be presented in as much detail as practical and include, as a minimum, for each of the following elements:

- o A specific statement of problems, objectives and major difficulties anticipated, if any.
- o An in-depth description of the principles and techniques which will be applied in the solution of problems anticipated.

(v) Technical Approach

**Criterion I - Technical Approach**

A thorough determination shall be made as to the extent and adequacy of the offeror's understanding of the issues and research objectives described in the statement of work. In addition, the completeness, relevancy, and rationale of the proposed coordinated research effort will be evaluated.

**I.A. Understanding of the Technical Issues.**

Understanding of technical issues relating to the scope of work as shown by discussions of the (1) applicability of the proposal to the Departmental objectives, (2) basic concepts, (3) the adequacy and reasonableness of the technical approach for reservoir rock and associated fluid(s) characterization using an interdisciplinary approach, (4) prior research that contributes to the scientific background of the proposal, (5) current related research being conducted by the offeror and others, (6) the relative merits of the different approaches, (7) identification of the targeted formation and/or reservoir and the associated depositional environment where appropriate and quantify target resource potential, (8) industrial participation (include letters of commitment in appendix) and (9) technology transfer activities that are planned throughout the contract period. The offeror must demonstrate that productive activity on the Statement of Work can begin upon contract award without the need for exhaustive literature searches, numerous technical visits, consultations, extensive laboratory set-up, or personnel training.

**I.B. Adequacy and Suitability of Project Organization.**

Adequacy and suitability of proposed project organization for accomplishing the Statement of Work. This section may include (1) discussions of the intermediate objectives, (2) staging of tasks and subtasks in a logical manner, (3) requirements for verification of subsections of the work through intermediate milestones and deliverables, (4) establishment of authorship for intermediate deliverables (5) optimum utilization of facilities and staff, and (6) how the logic flow from task to task will efficiently produce the final objective of the project.

### **I.C. The Completeness, Thoroughness, Rationale, and Uniqueness of the Planned Technical Approach.**

The offeror shall provide a **detailed Statement of Work (SOW)** organized by tasks and subtasks with associated objectives, milestones and deliverables that allow an evaluator to determine the quality, quantity and completeness of the research being proposed. This section should include (1) a statement of the scope of work, (2) descriptions of each task and subtask, sufficiently detailed to allow for evaluation of thoroughness and adequacy of generated data bases for subsequent model development and project completeness, (3) a schedule of the estimated time for each task and subtask, and (4) personnel tied to tasks and subtasks by person-hours (weeks or months) through use of a Gantt chart.

### **Criterion II - Key Personnel, Qualifications, Experience, and Availability.**

#### **II.A. Technical experience of Key Personnel.**

Qualifications of key personnel in the proposed areas of research, both from within the contracting organization as well as other research participants involved through cost-participation, subcontracting, consultants or by cooperative agreement with industry, state agencies, or academic research organizations shall be included.

Technical Qualifications: The offeror must provide the extent of education, relevant technical experience, resumes, and professional development of key personnel in relation to the work proposed, and present a discussion of demonstrated past performance in related efforts, as an indication of whether the offeror is likely to perform successfully in accordance with their proposal.

Information provided in the proposal should demonstrate that the key personnel are currently or have recently been active in the required areas of expertise to fulfill their specific tasks within the overall co-coordinated, interdisciplinary research effort. The key personnel should present recent, relevant publications in peer-reviewed scientific journals, patents related to the proposed SOW, or recent accomplishments that demonstrate the ability to perform productive research in the proposed area of research. The identification of individuals tied to tasks and subtasks with assigned authorship for deliverables shall allow reviewers the ability to assess individual's



relevant background and experience as it relates to specific work packages.

Key personnel will be evaluated with regard to their technical and project management qualifications. The proposed project team organization will be evaluated to determine the experience, capabilities, resources, and facilities that they can draw upon to accomplish the goals of this solicitation in an efficient and productive manner.

**II.B. The availability of Key Personnel to Conduct, Supervise, and Guide the Research Project.**

The key personnel's availability in terms of staff hours assigned to the project, during the period of performance shall be described in the proposal. Statements or letters of commitment reflecting staff hours assigned to the project from researchers and their organizations are required for all key personnel involved in the overall project effort. Proposed key personnel should provide their previous experience in supervising and managing research projects.

**II.C. An Organizational structure that encourages group interaction and fosters an interdisciplinary "team" approach toward the research effort.**

The organizational structure shall be developed to encourage rather than impede active discussions and interactions between researchers of the various disciplines assigned to the research effort. The offeror must provide a description of the proposed project management scheme, designed to foster an interdisciplinary team approach toward the proposed research to be used by the research organization(s), and the relationships of each organization to the offeror's corporate structure.

**Criterion III - Corporate Experience, Past Performance and Institutional Facilities**

**III.A. Experience and Performance in Similar Research efforts through Interdisciplinary Team Dynamics.**

Evidence of similar interdisciplinary efforts, which focused on reservoir and associated fluids characterization shall be briefly documented. Include published references and/or names and phone numbers of individuals who may be contracted for corroboration.

Documented experience at implementing coordinated technology transfer activities throughout the duration of the proposed effort shall be discussed.

### **III.B. Project Organization and Management.**

The offeror shall provide a description of the proposed project management and oversight scheme to be used by each organization. This includes a detailed organizational chart showing the lines of authority and the responsibilities of the research organization(s) involved. Discuss how each organization will interface between units and/or levels to assure coordination and communication between each discipline group involved in the proposed project.

### **III.C. Adequacy of the equipment and facilities necessary to accomplish the proposed research**

Describe pertinent test facilities, equipment, support personnel, and other resources, related to the overall effort and present how these will be applied to the proposed Statement of Work (SOW). This should include the resources available to various interdisciplinary co-researchers that are based in industry, state organizations, academic, or other research organizations, subcontractors, consultants, vendors, and commercial laboratories that will be brought into the overall research effort to focus on one or more of the integrated tasks.

## **L.13(d) PREPARATION INSTRUCTIONS: VOLUME III - COST PROPOSAL**

Volume III - Cost Proposal shall consist of the offeror's estimated costs to perform the desired work as set forth in the SOW. Since each Cost Proposal shall be evaluated to determine realism, accuracy, and reasonableness, and an understanding of the magnitude of effort, as well as being the basis for any necessary cost negotiation, it shall be accurate, complete, and well documented. The SF-1411 and Exhibits thereto are provided in Appendix IV.

### **L.13(d)(1) Format and Contents.**

As a minimum, Volume III - Cost Proposal shall contain the information specified below in accordance with the format provided below. All pages, including forms, must be page numbered and all forms, tables, or exhibits must be identified in the table of contents or index. All forms, tables, or exhibits must be clearly identified.

- (i) Cover Sheet: A completed and signed cover sheet in the format shown in Appendix II shall be used.
- (ii) Table of Contents: Proposals shall include table of contents to facilitate locating the elements of the proposal.
- (iii) Section One, Mandatory Exhibits "A" Through "J"

Exhibits "A" through "J" identified below ARE MANDATORY and shall be included in the cost proposal. Sample forms for these exhibits are provided in Appendix IV. Unless otherwise stated, the exact form need not be utilized; however, the information indicated both in this section and on the sample forms is required and must be submitted.

Cost information in the same format and level of detail is required for each subcontract or intercompany transfer estimated to exceed \$100,000. The trail from the subcontractor's project cost summaries to the offeror's Subcontracted Items line on Exhibit B-2 should be clear. Provide explanations for any differences between the amount proposed by the subcontractor to the offeror and the amounts proposed by the offeror to the Government for subcontract work.

- (A) Exhibit A: GSA Standard Form 1411 (or SF 1448).

Submittal of a fully executed GSA SF-1411 is mandatory and is to be completed by the offeror and all proposed subcontractors (over \$500,000). Detailed instructions accompany the SF 1411. Completion of the remaining exhibits will provide supporting documentation for the proposed cost shown in Blocks 6A to 6C of the SF-1411.

NOTE 1: If the total price proposed by the offeror or individual subcontractor is less than \$500,000 (but greater than \$100,000), the SF 1448 may be used. Supporting cost documentation, through the completion of Exhibits B through J, is still required with the submission of an SF-1448.

NOTE 2: It is possible to access/download/print the SF 1411 or SF 1448 from the following: <http://www.gsa.gov/form/farnumer.htm>. These files are in the Portable Document Format (PDF) and must be read/printed via the Adobe Acrobat Reader.

- (B) Exhibit B-1: Summary of Cost Elements by Task and for Total Project.  
Exhibit B-2: Summary of Cost Elements by Task for Offeror's Fiscal Year.

This is a two-part exhibit, with one Exhibit B-1 providing a summary of the total costs for each task AND the resulting total project costs. To support the Exhibit B-1 amounts, an individual Exhibit B-2 is required for each of the offeror's fiscal years in which the project is to be performed, and will provide the costs by task within each fiscal year. All of the Exhibit B-2s will roll up into the project totals shown on the Exhibit B-1.

- (C) Exhibit C: Summary of Direct Materials and/or Equipment.

Provide a consolidated priced summary of individual material quantities. Indicate the basis for the proposed prices, i.e. written quotes, catalogue prices, prior invoices, shop estimates, etc. Where appropriate, identify the vendor and provide the date and information for multiple quotes.

- (D) Exhibit D-1: Summary of Direct Labor.  
Exhibit D-2: Summary of Direct Labor Hours by Task

This is a two-part exhibit, in which the Exhibit D-1 provides the number of direct labor hours, the direct labor hourly rates, and the labor cost for each labor category proposed. As this information is required for each task by fiscal year, multiple forms are needed so that the total labor for each task matches the labor on the Exhibit B-2 task summaries.

On Exhibit D-2, provide the direct labor hours by task for each labor category for the prime contractor, and all subcontractors and consultants. As an attachment to Exhibit D-2, provide a separate page that defines all labor category titles listed on the Exhibit D-2. This definition should discuss the duties normally performed by personnel having that title, and differentiate between levels of the same title (i.e., Senior Engineer vs. Junior Engineer, Technician I vs. Technician II, etc.).

(E) Exhibit E: Summary of Travel.

Each trip must be itemized to identify the destination, number of travelers, purpose, and length of the trip. Provide the rates used to estimate costs for airfare, lodging, meals and incidental expenses, and ground transportation.

(F) Exhibit F: Summary of Other Direct Costs.

The amount and basis for proposed costs not otherwise shown should be included here. For example, the number of hours and the hourly charge for computer time proposed might be included.

(G) Exhibit G-1: Summary of Indirect Expense Pools and Allocation Bases.

Exhibit G-2: Summary of Proposed Indirect Rates.

This is a two-part exhibit, with one Exhibit G-2 providing a summary of the indirect rates developed on all Exhibit G-1s. An individual Exhibit G-1 is required for EACH indirect cost proposed, e.g. material overhead, labor overhead, G&A expense, etc. Each Exhibit G-1 will contain the major pool expense groupings by line item and dollar amount for the offeror's most recently completed fiscal year, the current fiscal year, and an estimate for the next fiscal year. Similarly, the allocation base must be identified and the dollar amount provided to permit verification of the resulting indirect rates. The inclusive dates of the offeror's fiscal year must also be identified.

If agreement has been reached with another governmental organization for the use of provisional rates, a copy of the approved rate agreement can be submitted in lieu of Exhibit G-1, but an Exhibit G-2 is still required.

(H) Exhibit H: Summary of Escalation Factors.

This exhibit shall provide, by cost element, the escalation factors (percentages) applied to current costs to estimate the proposed costs for future fiscal years.

- (I) Exhibit I: Independent Research & Development (IR&D) and Bid & Proposal (B&P) Costs.

The offeror must submit the Independent Research & Development and Bid & Proposal cost information requested on the form provided.

- (J) Exhibit J: Accounting System Survey.

The Accounting System Survey provides information on the offeror's accounting system capabilities. This exhibit should be completed by an individual responsible for maintaining the offeror's accounting system. The form provided must be used.

- (iv) Section II, Additional Information.

- (A) Estimating Procedure.

Provide a discussion of the offeror's estimating procedure and the rationale used in the development of the proposed costs. For effective negotiations, it is essential that there be a clear understanding of: the existing verifiable data; the judgmental factors applied in projecting from known data to the estimate; and the contingencies used by the offeror in the proposed costs.

- (B) Subcontracts.

In addition to the data required above, the following is required for each planned subcontract of \$100,000 or more:

1. A brief description of the work to be subcontracted.
2. The number of quotes solicited and received.
3. The cost or price analysis performed by the offeror.
4. Names and addresses of the subcontractors tentatively selected and the basis for their selection; i.e. low bidder, delivery schedule, technical competence, etc.
5. The offeror's rating of the subcontractor's competence; i.e. fair, good, excellent.

6. Type of contract and estimated cost and fee or profit.
7. Affiliation with the offeror, if any.
8. Whether or not the subcontractor is a small business concern.
9. The extent of subcontract supervision required.
10. Whether or not the subcontractor is a minority business concern.
11. Whether or not the subcontractor is a woman-owned business concern.

(C) Consultants.

If the offeror proposed the use of consultants, provide the following for each named consultant:

1. Résumé.
2. Identification of all cost elements included in the consultant's daily/hourly rates, plus a detailed explanation of any costs that would be charged over and above the rates.
3. A signed consulting agreement between the offeror and the consultant.
4. A signed statement from the consultant that the proposed rate is a "most favored customer rate", or the reason such a rate was not offered.
5. A determination by the offeror that the rate proposed is comparable to the rates of other consultants doing similar types of work.
6. The offeror shall prepare a technical evaluation of the need to employ a consultant, which shall include the consultant's technical ability to perform the desired work, along with a statement and reason that in-house resources are unavailable for performance of the effort.

In those cases where a consultant is not named but the offeror realizes a need will exist, the offeror shall support the proposed daily rate by supplying the information in item numbers 5. and 6. above.

(D) Facilities Capital Cost of Money (FAR 52.215-30, SEP 1987)

(a) Facilities capital cost of money will be an allowable cost under the contemplated contract, if the criteria for allowability in subparagraph 31.205-10(a)(2) of the Federal Acquisition Regulation are met. One of the allowability criteria requires the prospective contractor to propose facilities capital cost of money in its offer.

(b) If the prospective Contractor does not propose this cost, the resulting contract will include the clause Waiver of Facilities Capital Cost of Money.

(E) Cost Sharing, In-kind Contributions, etc.

For cost sharing or cost participation that is proposed, information should be provided concerning the proposed contractual arrangements. Examples of arrangements and the information required are as follows (however, note that arrangements are not limited to these three):

1. Cash: Indicate the percentage proposed and identify the base to which the rate would be applied.
2. Elimination of certain items from indirect pools: Identify which elements.
3. In-kind contribution of facilities: Explain how the value of the contribution was calculated.
  - o The value that will be allowed for contributions of currently depreciating property is the depreciation schedule being used and allowed under statute or IRS regulation for such property. This depreciation will be limited in its cost share value to the depreciation claimed during the life of the contract. For contribution of property by tax exempt organizations, a fair use value will be assigned to the property equivalent



to the value that would be assigned were the owner not tax exempt.

- o For fully depreciated property contributed to the project as cost share, a fair use value for the equipment or facility will be assigned by DOE. The fair use value will be the average annual depreciation used by the Proposer as permitted under statute or IRS regulations under which it was depreciated.
- o Contributed equipment and facilities will be counted as cost sharing only for the periods during which they are brought into use for the contract.

In any case, any proposed cost sharing method or value is subject to independent evaluation and audit by DOE in accordance with DEAR 917.70. The cost participation shall be applied to actual allowable contract costs incurred as a whole rather than to any individual element of cost.

(F) High Value Equipment.

Offerors are informed that when the use of High Value Equipment (in excess of \$10,000) is applicable to the acquisition, the Government reserves the right to require the submission of the feasibility of lease versus purchase studies by the successful offeror.

(G) Use of ADPE.

If the use of automatic data processing equipment (ADPE) is proposed by the offeror, the Government reserves the right to require the preparation of (1) feasibility and (2) lease versus purchase studies by the successful offeror.

(H) Financial Condition.

1. Provide a current balance sheet, profit and loss statement for all quarters reported on the current fiscal year, and an audited financial statement for each of the last 3 fiscal years.

2. Describe fully any assets other than cash, accounts receivable, land, buildings, and equipment carried on the above balance sheet.
  3. State what percentage this proposed contract will represent of the offeror's estimated total business during the period of performance.
  4. Describe fully the impact of this project on the offeror's organization and any contingency, limitation, and conditions affecting availability of funds for this project.
- (l) The offeror shall provide any other supporting information deemed necessary in this section.

(v) Section Three. Exceptions and Deviations.

The offeror shall identify and explain any exceptions, deviations, or conditional assumptions taken with respect to the requirements of the PRDA with respect to the Cost Proposal.

Any exceptions taken must contain sufficient amplification and justification to permit evaluation. All benefits to the Government shall be explained for each exception taken. Such exceptions will not, of themselves, automatically cause a proposal to be termed unacceptable. A large number of exceptions, or one or more significant exceptions not providing benefit to the Government may, however, result in rejection of your proposal(s) as unacceptable.

L.13(d)(2) Certified Cost or Pricing Data.

In accordance with P.L. 87-653, as implemented by FAR 15.804, offerors may be required to certify that any cost or pricing data submitted is accurate, complete and current. In such an event, the required format for the certification can be found in FAR 15.804-4. The executed certification must be presented to the Contracting Officer after negotiations are concluded and before award can be made. FAR 15.804-7 contains applicable procedures where it is subsequently found that defective cost or pricing data was submitted.

In accordance with FAR 15.804, any offeror required to submit the above certification shall also be required to either submit, or arrange for the submission, of accurate, complete, and current cost or pricing data from his prospective subcontractors whose individual cost estimates exceed

\$500,000. This requirement may be waived under the circumstances as set forth in FAR 15.804-3.

Notwithstanding the above paragraphs, any successful offeror shall comply with applicable requirements of the "Subcontractor Cost or Pricing Data" clause of the award.

L.13(d)(3) Modifications to Cost Proposal.

Any modification to the Cost Proposal shall clearly indicate the cost impact of the modification to the same level of detail shown in the original proposal.

Once the prospective offeror has been selected, the estimated costs submitted with the proposal shall not be subject to increase, except for changes in certified cost or pricing data submitted with the proposal, unless changes are made in the requirements of the request for proposal.

Furthermore, increases shall be considered only in regard to those requirements that are actually affected by the changes (whether they are initiated by the Government, or by the offeror), and then only to the extent that such increases will be considered separately, and not as part of a combined overall negotiation of the estimated cost and fee for the proposed award.

L.13(e) VOLUME IV - ENVIRONMENTAL, HEALTH, SAFETY AND SOCIETY IMPACT

The Environmental, Health, Safety, and Society Impact Proposal shall consist of a completed Environmental Assessment Questionnaire contained in Appendix V.

DOE shall use this questionnaire to evaluate the potential impacts of the proposed project, and at the earliest possible time, whether execution of the proposed activities will require an Environmental Assessment (EA), an Environmental Impact Statement (EIS), or can be covered under a Categorical Exclusion (CX) (see Appendix V). By virtue of the nature of this PRDA, most proposals will qualify for a categorical exclusion under the National Environmental Policy Act (NEPA). However, if the environmental impacts are considered significant, the selectee, prior to award, will be required to prepare the Environmental Compliance Plan, an Environmental Monitoring Plan, and Environmental Report. Contract award will be made after the environmental material submitted by the respective contractor has been reviewed and accepted by DOE. The environmental volume

(Questionnaire) will be evaluated according to the adequacy and reasonableness of environmental information provided.

L.13(e)(1) **FORMAT AND CONTENT - GUIDELINES FOR COMPLETING THE ENVIRONMENTAL ASSESSMENT QUESTIONNAIRE**

The Offeror is required to submit a completed Environmental Assessment Questionnaire as Volume IV of the proposal. This will be a detailed, self-contained document summarizing the proposed action, its alternatives, the existing environment, anticipated impacts from the project, and any regulatory compliance necessary.

A. Project Summary

This section should contain a succinct summary of all activities or tasks to be performed, as well as describing all locations where work is to be performed, the objectives of the project and the frequency of any testing.

B. Proposed Project and Its Alternatives

This section should provide information relating to objectives of the proposed action, the work involved, the schedule, the location and associated requirements (land, natural resources, etc.), and alternatives to the proposed action.

C. Project Location

The description should include a project site plan and topographic map of the area, as well as, a description of physical setting, structures, transportation patterns, and nearby bodies of water. It should also discuss resource requirements such as land, energy forms and quantity, water, and materials.

Offsite facility requirements should be identified, and all in-plant and off-site discharges, and on-site waste storage during construction, operation, maintenance, and disposition of the project should be detailed.

A complete description of likely alternatives to the project, including a no action alternative, should be discussed. The description should address technology specific aspects such as process design configurations, and site specific considerations alternative waste disposal sites, etc.

D. Environmental Impacts

This section should address the existing environment at the project location, and the impacts and consequences of the proposed project (at the selected site and the alternative sites, if appropriate). The answers should include, but should not be limited to:

1. Land Use: description of the affected area; dimensions; current usage (e.g., farming, industrial, etc.); existing landforms (i.e., drainage areas, runoff areas, etc.); pipelines and transmission lines; transportation access (by rail, road, barge). Impacts from construction and operation activities; waste disposal problems (for non-toxic, toxic, and/or hazardous substances); effluent discharges requiring settling ponds, etc., the source/type of any waste produced (i.e., fly ash, bottom ash, scrubber sludge, etc.) and approximate weight, density, volume.
2. Construction Activities and/or Operation: The existing environment should be evaluated in terms of the potential impacts anticipated during construction, operation and disposition. Any mitigative measures that will be applied to address these impacts should be discussed. A brief description of the construction and operational activities, including the duration and schedule should be included.
3. Geologic/Soil Conditions: topographic stability; formations and/or faulting; productivity of soil; any unique soil species; susceptibility to erosion. Subsidence caused by construction; erosion; stream diversion; floodplain and wetland intrusion, increases/decreases in soil permeability and filtration.
4. Vegetation and Wildlife Resources: description any indigenous flora, fauna, and wildlife; state and federally listed endangered species and their habitats; and sensitive habitats such as wetlands and/or floodplains. Construction impacts in wetlands, floodplains, or other ecologically sensitive terrain; impacts to endangered species.
5. Socioeconomic Conditions: population; employment and labor mix. Increases/decreases in labor requirements; changes in labor mix.

6. Historic/Cultural Resources: historic and/or cultural places; archaeological sites. Disturbance of an archeological site caused by construction, interfering with Native American tribal or other religious practices and sites; impacts on community character.
7. Visual Resources: scenic vistas; aesthetic landscaping; aesthetic impacts; visual impacts.
8. Atmospheric Conditions/Air Quality: identification of affected air quality control region(s); local climate; existing air quality conditions in immediate vicinity of the proposed site. Projections of air quality changes; estimated process emissions (e.g., stack emissions); construction emissions from land disturbance or the operation of machinery/equipment, solid waste disposal operations, coal handling, etc. (source, emission rate, duration, and frequency of emission should be described).
9. Hydrologic Conditions/Water Quality: identification of watershed and downstream drainage; surface and groundwater quality; floodplains; unique aquatic habitats; recreational areas; public water supplies; any constraints on water availability imposed by treaties, court decree, state/federal water laws; nearby aquifers and the depth of ground water; existing wastewater treatment disposal and/or facilities. Changes in groundwater/surface water quality/quantity; stream diversion resulting from construction, runoff from storage piles (source, discharge rate, discharge frequency and duration), leachates from waste disposal sites; wastewater treatment and discharges.
10. Solid and Hazardous Wastes: description of the total quantity of wastes as well as a delineation of the types of wastes, whether they are hazardous or not and their composition; where the wastes will be disposed and/or how they will be treated before disposal.
11. Health/Safety Factors: current emissions (toxic and non-toxic); effluents; noise levels. Occupational hazards of construction activities; exposure to toxic/ hazardous substances; increases in ambient noise, odor, heat; industrial accidents.

E. Regulatory Compliance

This section should identify all of the environmental laws and regulations (federal, state, and local) for which compliance would be necessary. This should include, but is not limited to the Resource Conservation and Recovery Act, the Comprehensive Environmental Response, Compensation, and Liability Act, Toxic Substance Control Act, the Water Pollution Control Act, Clean Air Act, and Occupational Safety and Health Act. The proposer's strategy for meeting and documenting all compliance requirements should be discussed.

In compliance with federal air, land use and water quality statutes, the best available control technology (BACT) and feasible practices that would be used should be identified. In addition, whether the proposed site is in attainment or nonattainment with current standards should be addressed.

All agencies and persons consulted regarding federal, state and local regulatory compliance and permitting requirements should also be listed.

F. Significant Impacts

This section should provide a summary of what the proposer believes to be significant impacts from the project, both positive and negative.

L.14 SUBMISSION OF OFFERS (FAR 52.215-9, MAR 1997)

- (a) The date and time for submission of proposals shall be September 2, 1997, 4:00 pm.
- (b) External Markings and Place for Submittal of Proposals and Other Communications.
  - (1) Proposals Being Sent by Mail: Mailed proposals shall be submitted to the address set forth below. External markings for the submitted proposal package(s) shall be substantially as set forth below. The offeror shall complete all blanks utilizing the date set forth in paragraph (a) above.

FROM: \_\_\_\_\_  
\_\_\_\_\_

MAIL TO: U.S. Department of Energy  
National Petroleum Technology Office  
P. O. Box 3628  
Tulsa, OK 74101  
ATTENTION: Contracts Office

PRDA NO.: DE-RA26-97BC15029

DUE: 4:00 p.m. September 2, 1997

NOTICE TO DOE MAIL ROOM: THIS IS A PROPOSAL UNDER THE ABOVE IDENTIFIED PRDA. THE DATE AND TIME OF RECEIPT IS TO BE LOGGED, AND ALSO MARKED ON THIS PACKAGE.

- (2) Handcarried Proposals: Handcarried proposals will be accepted at the address shown below. External markings for the submitted proposal package(s) shall be substantially as set forth below. The offeror shall complete all blanks utilizing the date set forth in paragraph (a) above.

FROM: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

HANDCARRY TO: U.S. Department of Energy  
National Petroleum Technology Office  
Williams Center, Tower One  
One West 3rd Street, Suite 1658  
Tulsa, OK 74103  
ATTENTION: Diane Franklin, Contracts Office

PRDA NO.: DE-RA26-97BC15029  
DUE: 4:00 p.m. September 2, 1997

NOTICE TO COURIER: It may not be possible to deliver this package outside of the hours of 8:00 a.m. to 4:30 p.m. workdays. Delivery to any other location, including the site central delivery area may result in late receipt and is strongly discouraged.

- (c) Handcarried Proposals

If the offeror elects to forward the proposal by means other than the United States Mail, he assumes the full responsibility of ensuring that the proposal



is received by the date and time specified in paragraph (a) above. Such proposals must be closed and sealed as if for mailing.

(d) Telegraphic Proposals

Telegraphic proposals will not be considered, however, proposals may be modified by telegraphic notice, provided such notice is received prior to the date and time specified for receipt. The term "telegraphic" includes mailgrams.

(e) Number of Copies to be Submitted

- (1) The required number of each proposal part is shown in Clause L.13(a)(1).
- (2) Packaging: Each group, designated in L.13(a)(1) is to be packaged individually. This does not preclude packaging more than one, or all groups in a single overall package. Mark the group number on the outside of the individual packages. External markings and place for submission of proposals is designated in paragraph (b) above.

(f) Signed Originals

**COPY NO. 1 OF THE PROPOSAL SHALL CONTAIN THE SIGNED ORIGINAL OF ALL DOCUMENTS REQUIRING SIGNATURE BY THE OFFEROR.** Use of reproductions of signed originals is authorized in all other copies of the proposal.

**L.15 LATE SUBMISSIONS, MODIFICATIONS, AND WITHDRAWALS OF OFFERS.**  
(FAR 52.215-10, MAY 1997)

- (a) Any proposal received at the office designated in the solicitation after the exact time specified for receipt will not be considered unless it is received before award is made and--:
  - (1) It was sent by registered or certified mail not later than the fifth calendar day before the date specified for receipt of offers (e.g., an offer submitted in response to a solicitation requiring receipt of offers by the 20th of the month must have been mailed by the 15th);
  - (2) It was sent by mail (or telegram or facsimile, if authorized) or hand-carried (including delivery by a commercial carrier) if it is determined by the Government that the late receipt was due primarily to Government mishandling after receipt at the Government installation;

- (3) It was sent by U.S. Postal Service Express Mail Next Day Service-Post Office to Addressee, not later than 5:00 p.m. at the place of mailing two working days prior to the date specified for receipt of proposals. The term “working days” excludes weekends and U.S. Federal holidays;
  - (4) It was transmitted through an electronic commerce method authorized by the solicitation and was received at the initial point of entry to the Government infrastructure not later than 5:00 p.m. one working day prior to the date specified for receipt of proposals; or
  - (5) There is acceptable evidence to establish that it was received at the activity designated for receipt of offers and was under the Government’s control prior to the time set for receipt of offers, and the Contracting Officer determines that accepting the late offer would not unduly delay the procurement; or
  - (6) It is the only proposal received.
- (b) Any modification of a proposal or quotation, including a modification resulting from the Contracting Officer’s request for “best and final” offer, is subject to the same conditions as in subparagraphs (a)(1) through (a)(5) of this provision.
  - (c) The only acceptable evidence to establish the date of mailing of a late proposal or modification sent either by U.S. Postal Service registered or certified mail is the U.S. or Canadian Postal Service postmark both on the envelope or wrapper and on the original receipt from the U.S. or Canadian Postal Service. Both postmarks must show a legible date or the proposal, quotation, or modification shall be processed as if mailed late. “Postmark” means a printed, stamped, or otherwise placed impression (exclusive of a postage meter machine impression) that is readily identifiable without further action as having been supplied and affixed by employees of the U.S. or Canadian Postal Service on the date of mailing. Therefore, offerors or quoters should request the postal clerk to place a legible hand cancellation bull’s eye postmark on both the receipt and the envelope or wrapper.
  - (d) Acceptable evidence to establish the time of receipt at the Government installation is the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.
  - (e) The only acceptable evidence to establish the date of mailing of a late offer, modification, or withdrawal sent by Express Mail Next Day Service-Post

Office to Addressee is the date entered by the post office receiving clerk on the "Express Mail Next day Service-Post Office to Addressee" label and the postmark on both the envelope or wrapper and on the original receipt from the U.S. Postal Service. "Postmark" has the same meaning as defined in paragraph (d) of this provision, excluding postmarks of the Canadian Postal Service. Therefore, offerors or quoters should request the postal clerk to place a legible hand cancellation bull's eye postmark on both the receipt and the envelope or wrapper.

- (f) Notwithstanding paragraph (a) of this provision, a late modification of an otherwise successful proposal that makes its terms more favorable to the Government will be considered at any time it is received and may be accepted.
- (g) Proposals may be withdrawn by written notice or telegram (including mailgram) received at any time before award. If the solicitation authorizes facsimile proposals, proposals may be withdrawn via facsimile received at any time before award, subject to the conditions specified in the provision entitled "Facsimile Proposals". Proposals may be withdrawn in person by an offeror or an authorized representative, if the representative's identity is made known and the representative signs a receipt for the proposal before award.
- (h) If an emergency or unanticipated event interrupts normal Government processes so that technical proposals cannot be received at the office designated for receipt of technical proposals by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation or other notice of an extension of the closing date, the time specified for receipt of technical proposals will be deemed to be extended to the same time of day specified in the solicitation on the first work day on which normal Government processes resume. If no time is specified in the solicitation, the time for receipt is 4:30 p.m., local time, for the designated Government office.

#### L.16 FAILURE TO SUBMIT OFFER (FAR 52.215-15, MAY 1997)

Recipients of this solicitation not responding with an offer should not return this solicitation, unless it specifies otherwise. Instead, for paper transactions, they should advise the issuing office by letter, postcard, or established electronic commerce methods, whether they want to receive future solicitations for similar requirements. Electronic solicitations do not require notification of a desire to receive future solicitations, since these solicitations will be openly available to any interested party. If a recipient does not submit an offer and does not notify the

issuing office that future solicitations are desired, the recipient's name may be removed from the applicable mailing list.

#### L.17 NUMBER OF AWARDS

It is anticipated that there will be multiple awards resulting from this Solicitation. However, the Government reserves the right to make any number of awards, or no award, if considered to be in the Government's best interest to do so.

#### L.18 CONTRACT AWARD. (OCT 1995) -- Alternate II (FAR 52.215-16, OCT 1995)

- (a) The Government will award a contract(s) resulting from this solicitation to the responsible offeror(s) whose offer conforming to the solicitation will be most advantageous to the Government, cost or price and other factors, specified elsewhere in this solicitation, considered.
- (b) The Government may (1) reject any or all offers if such action is in the public interest, (2) accept other than the lowest offer, and (3) waive informalities and minor irregularities in offers received.
- (c) The Government intends to evaluate proposals and award a contract(s) without discussions with offerors (except communications conducted for the purpose of minor clarification). Therefore, each initial offer should contain the offeror's best terms from a cost or price and technical standpoint. However, the Government reserves the right to conduct discussions if later determined by the Contracting Officer to be necessary.
- (d) The Government may accept any item or group of items of an offer, unless the offeror qualifies the offer by specific limitations. Unless otherwise provided in the Schedule, offers may be submitted for quantities less than those specified. The Government reserves the right to make an award on any item for a quantity less than the quantity offered, at the unit cost or prices offered, unless the offeror specifies otherwise in the offer.
- (e) A written award or acceptance of offer mailed or otherwise furnished to the successful offeror(s) within the time for acceptance specified in the offer shall result in a binding contract without further action by either party. Before the offer's specified expiration time, the Government may accept an offer (or part of an offer, as provided in paragraph (d) above), whether or not there are negotiations after its receipt, unless a written notice of withdrawal is received before award. Negotiations conducted after receipt of an offer do not constitute a rejection or counteroffer by the Government.

- (f) Neither financial data submitted with an offer, nor representations concerning facilities or financing, will form a part of the resulting contract. However, if the resulting contract contains a clause providing for price reduction for defective cost or pricing data, the contract price will be subject to reduction if cost or pricing data furnished is incomplete, inaccurate, or not current.
- (g) The Government may determine that an offer is unacceptable if the prices proposed are materially unbalanced between line items or subline items. An offer is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable doubt that the offer will result in the lowest overall cost to the Government, even though it may be the low evaluated offer, or it is so unbalanced as to be tantamount to allowing an advance payment.
- (h) The Government may disclose the following information in post-award debriefings to other offerors: (1) the overall evaluated cost or price and technical rating of the successful offeror; (2) the overall ranking of all offerors, when any ranking was developed by the agency during source selection; (3) a summary of the rationale for award; and (4) for acquisitions of commercial end items, the make and model of the item to be delivered by the successful offeror.

#### L.19 DISCUSSIONS WITH OFFERORS

In accordance with provision L.18(c), above, in the event that the conduct of written or oral discussions with any or all of the offerors is deemed necessary, offerors will be notified of the date, time, and place for any such oral discussions. Any such discussions will be conducted in accordance with DOE acquisition policies and procedures.

#### L.20 CONTENT OF RESULTING CONTRACT

Any contract awarded as a result of this PRDA will contain Part I -- The Schedule (see Sections A through H), Part II -- Contract Clauses (see Section I), and Part III, Section J -- List of Documents, Exhibits and Other Attachments (excluding those attachments included in this PRDA relating to submission of proposals). Blank areas appearing in these sections, indicated by "To Be Determined [TBD]" will be completed after negotiations.

L.21 AWARD INFORMATION

Written notice to unsuccessful offerors and contract award information will be promptly released in accordance with DOE regulations applicable to negotiated procurement.

L.22 PREAWARD ON-SITE EQUAL OPPORTUNITY COMPLIANCE REVIEW  
(FAR 52.222-24, APR 1984)

An award in the amount of \$1 million or more will not be made under this solicitation unless the Offeror and each of its known first-tier subcontractors (to whom it intends to award a subcontract of \$1 million or more) are found, on the basis of a compliance review, to be able to comply with the provisions of the Equal Opportunity Employment clause of this solicitation.

L.23 AGENCY PROTEST REVIEW (DEAR 952.233-5. SEP 1996)

Protests to the agency will be decided either at the level of the Head of Contracting Activity (HCA) or at the Headquarters level. DOE's agency protest procedures, set forth in DEAR 933.103, elaborate on these options and on the availability of a stay of a procurement that is protested to the agency. DOE encourages potential protesters to discuss their concerns with the Contracting Officer prior to filing a protest.

L.24 SERVICE OF PROTEST (FAR 52.233-2, AUG 1996; DEAR 952.233-2)

- (a) Protests, as defined in section 33.101 of the Federal Acquisition Regulation, that are filed directly with an agency, and copies of any protests that are filed with the General Accounting Office (GAO), shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgment of receipt from the Contracting Officer:

KEITH R. MILES, CONTRACTING OFFICER  
ACQUISITION & ASSISTANCE DIVISION  
DEPARTMENT OF ENERGY  
FEDERAL ENERGY TECHNOLOGY CENTER  
P.O. BOX 10940, MS 921-143  
PITTSBURGH, PA 15236-0940

- (b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

- (c) Another copy of a protest filed with the General Accounting Office shall be furnished to the following address within the time periods described in paragraph (b) of this clause:

U.S. DEPARTMENT OF ENERGY  
ASSISTANT GENERAL COUNSEL FOR PROCUREMENT  
AND FINANCIAL ASSISTANCE (GC-61)  
1000 INDEPENDENCE AVENUE, S.W.  
WASHINGTON, DC 20585  
FAX: (202) 586-4546

L.25 NOTICE OF PROTEST FILE AVAILABILITY (DEAR 952.233-4. SEP 1996)

- (a) If a protest of this procurement is filed with the General Accounting Office (GAO) in accordance with 4 CFR Part 21, any actual or prospective offeror may request the Department of Energy to provide it with reasonable access to the protest file pursuant to FAR 33.104(a)(3)(ii), implementing section 1065 of Public Law 103-355. Such request must be in writing and addressed to the contracting officer (see L.24(a)) for this procurement.
- (b) Any offeror who submits information or documents to the Department for the purpose of competing in this procurement is hereby notified that information or documents it submits may be included in the protest file that will be available to actual or prospective offerors in accordance with the requirements of FAR 33.104(a)(3)(ii). The Department will be required to make such documents available unless they are exempt from disclosure pursuant to the Freedom of Information Act. Therefore, offerors should mark any documents as to which they would assert that an exemption applies (see 10 CFR part 1004).

PART V - SECTION M  
EVALUATION FACTORS FOR AWARD

M.1 GENERAL

Proposals will be evaluated in accordance with applicable DOE acquisition policies and procedures. Evaluation will be performed to determine the offeror's understanding of work to be performed, technical approach, potential for completing the work as specified in the solicitation, cost reasonableness, the probable cost to the Government, and ranking with competing offerors.

Award will be made to that responsible offeror(s) whose offer(s) conforming to this solicitation is (are) considered most advantageous to the Government, considering the Evaluation Criteria in this Section M.

M.2 EVALUATION CRITERIA & RELATIVE IMPORTANCE, VOLUMES I THROUGH IV

M.2(a) Volume I -Offer and Other Documents (Business and Management)

M.2(a)(1) Volume I - Offer and Other Documents submitted in response to the PRDA will be evaluated in accordance with the criteria listed below:

1. The suitability of proposed teaming arrangement among participants (including subcontractors);
2. The adequacy of the proposed project management system necessary for assuring a well-planned, coordinated, and controlled project;
3. The degree to which the proposed subcontract(s) reflect consideration of the Energy Policy Act target groups;
4. The financial condition and capability of offeror(s).

M.2(a)(2) Relative Importance

The above criteria are of equal importance.

M.2(b) Volume II - Technical Proposal



M.2(b)(1) Technical proposals submitted in response to this PRDA will be evaluated and scored in accordance with the criteria listed below:

CRITERION	DESCRIPTION	WEIGHT PERCENT
<b>Criterion I: Technical Approach</b>		
I.A.:	Understanding of the technical issues.	20
I.B.:	Adequacy and suitability of project organization.	20
I.C.:	The completeness, thoroughness, rationale, and uniqueness of the planned technical approach.	<u>20</u>
<b>Subtotal Criterion I</b>		<b>60</b>
<b>Criterion II: Key Personnel qualifications, experience, and availability.</b>		
II.A.:	Technical Experience of key personnel.	10
II.B.:	The availability of key personnel to conduct, supervise, and guide the research project.	10
II.C.:	An organizational structure that encourages group interaction and fosters an interdisciplinary "team" approach toward the research effort.	<u>5</u>
<b>Subtotal Criterion II</b>		<b>25</b>
<b>Criterion III: Corporate experience, past performance, and Institutional Facilities.</b>		
III.A.:	Experience and performance in similar research efforts through interdisciplinary team dynamics.	5
III.B.:	Project organization and management.	5
III.C.:	Adequacy of the corporate/institutional equipment and facilities necessary to accomplish the proposed research.	<u>5</u>
<b>Subtotal Criterion III</b>		<b>15</b>
<b>TOTAL:</b>		<b>100</b>

M.2(b)(2) Relative Importance

The above criteria are listed by weighted factors as a percent of total proposal value. Sixty percent of the proposal shall be assigned to Criterion I, twenty-five percent shall be assigned to Criterion II, and fifteen percent shall be assigned to Criterion III.

M.2(c) Volume III - Cost

M.2(c)(1) Volume III - Cost Proposal, submitted in response to this PRDA, will be evaluated to:

1. Assess cost realism, accuracy; and
2. reasonableness.

M.2(c)(2) Relative Importance

Cost criteria are of equal importance.

M.2(d) Volume IV - Environmental

M.2(d)(1) Volume IV - Environmental will be evaluated to assess the adequacy and reasonableness of the Environmental Assessment Questionnaire.

M.2(d)(2) Relative Importance

No relative order of importance is established.

M.3 PROCESS

The evaluation and selection process will consist of the following three distinct phases: 1) preliminary review; 2) comprehensive evaluation and ranking; and 3) application of program policy factors and selection.

M.3(a) PRELIMINARY REVIEW

Proposals received in response to this solicitation shall be subjected to a Preliminary Review. In order to be considered for Comprehensive Evaluation, a proposal must successfully pass the Preliminary Review. Failure to meet any one of the Preliminary Evaluation requirements provided below will result in rejection of the proposal.

1. Proposes work that is relevant to DOE's Program objectives specified herein (see Part I, Section J, Attachment A); and
2. Contains sufficient technical, environmental, business and management, cost and other required information as described in the solicitation to enable comprehensive evaluation;

3. Meets the required minimum cost share (20% of total project cost); and
4. Has been signed by a responsible official of the proposing organization or a person authorized to obligate such organization.

In the event that, upon completion of the preliminary review, a proposal is not accepted for comprehensive evaluation, a prompt notice shall be sent to the offeror indicating the reason(s) that the proposal will not receive further consideration under this solicitation.

## M.3(b) COMPREHENSIVE EVALUATION AND FINAL RANKING

### M.3(b)(1) General

All proposals which successfully pass Preliminary Review shall be subjected to a Comprehensive Evaluation. The Comprehensive Evaluation shall be performed against the criteria listed in this section and a final ranking shall be established in accordance with applicable departmental policies and procedures. Section L provides instructions for preparing each volume of the proposal and describes what information each volume should contain. Each volume of the proposal generally correlates with evaluation criteria listed herein (Section M.2).

- The evaluation of Volume I - Offer and Other Documents, is conducted to determine the business management performance potential of the offeror. Volume I - Offer and Other Documents, will not be point scored, but rather will be assigned an adjectival rating (i.e, acceptable, marginal, unacceptable).
- The evaluation of Volume II - Technical Proposals, is conducted to determine the relative merits of each offeror's technical proposal in accordance with the pre-established weighted evaluation criteria. This evaluation results in a numerical point score for each technical proposal.
- The evaluation of Volume III - Cost Proposals, is conducted to assess realism, accuracy and reasonableness. Cost proposals will not be point scored nor adjectively rated.
- The evaluation of Volume IV - Environmental Proposal, is conducted to assess the proposed project's environmental impact. This evaluation will result in an adjectival rating (i.e, acceptable, marginal, unacceptable)

### M.3(b)(2) Overall Relative Importance of Volumes I Through IV

Proposals submitted will be comprehensively evaluated in accordance with the following categories of criteria in descending order of importance with technical criteria being predominant in importance:

- Technical
- Environmental
- Offer and Other Documents
- Cost

In establishing the final ranking of technical, environmental, business and management, and cost proposals, the proposed cost to the Government may become a deciding factor. An offer containing a superior technical proposal will have an advantage over offers which contain less qualified technical proposals but with lower proposed costs only so long as the offer with a superior technical proposal is considered to be worth the cost differential.

**In accordance with the Energy Policy Act (as implemented by DEAR 926.70) in instances in which two or more proposals being considered for final selection are ranked as essentially equal, after consideration of all technical and cost evaluation factors, and if one of these proposals is from an offeror from among an Energy Policy Act target group that offeror will be selected for award.**

## M.4 APPLICATION OF PROGRAM POLICY FACTORS AND SELECTION

### M.4(a) Program Policy Factors

These factors, while not indicators of the proposal's merit, e.g., technical excellence, environmental impact, cost, proposer's ability, etc., may be essential to the process of selecting the proposal that individually or collectively, will best achieve the program objectives. Such factors are often beyond the control of the offeror, and proposers should recognize that some very good proposals may not receive an award because they do not fit within a mix of projects which maximizes the probability of achieving the DOE's overall research and development objectives. Therefore, subsequent to proposal evaluations, the following considerations will be used by the Source Selection Official to assist in determining which of the ranked proposals shall receive DOE funding support:

1. To provide a balanced programmatic effort and a variety of different technical perspectives, it is desirable to support a diversity of projects from organizations of various size, firms in different industries, academe, and institutions having different philosophies (e.g., large and small businesses, energy firms, oil producers, universities and colleges, and non-profit research concerns).
2. It is desirable to select a group of projects which represent a diversity of technical approaches and methods.
3. Because the methods and techniques invited in this PRDA are applicable to a wide variety of oil reservoirs, it may be desirable to support complimentary efforts or projects, which, when taken together, will best achieve the research goals.
4. It is desirable to select a group of projects and proposers which represent the geographic diversity that is associated with oil reservoirs, and by necessity the technical expertise that is focused on these diverse geographic variations in petroleum resources.

The above factors will be independently considered by the Source Selection Official (SSO) in determining the optimum mix of proposals that will be selected for support. These policy factors will provide the SSO with the capability of developing, from the competitive procurement, a broad involvement of organizations and organizational ideas, which both enhance the overall technology research effort and upgrade the program content to meet the anticipated long-range goals of DOE.

#### M.4(b) Selection

The Source Selection Official will select a mix of proposals for award from the finding(s) established by the proposal evaluation panel. The Source Selection Official will take into account the relative technical, environmental, and business and management and cost rankings as well as applicable program policy factors in determining which proposal(s) will best satisfy program objectives.

APPENDIX I

PRDA DE-RA26-97BC15029  
FUNDAMENTAL GEOSCIENCE FOR RESERVOIR CHARACTERIZATION

INTENTION TO PROPOSE

OFFERORS ARE REQUESTED TO COMPLETE THE ENTRIES BELOW, AND DETACH AND RETURN THIS PAGE BY THE EARLIEST PRACTICAL DATE. THIS WILL ENABLE THE DOE TO MAKE NECESSARY ARRANGEMENTS FOR PROPOSAL EVALUATIONS.

=====

WE (CHECK ONE)

- ☐ DO INTEND TO SUBMIT A PROPOSAL
- ☐ DO NOT INTEND TO SUBMIT A PROPOSAL FOR THE FOLLOWING REASONS:

---

---

---

---

COMPANY NAME: \_\_\_\_\_

AUTHORIZED SIGNATURE: \_\_\_\_\_

[TYPED OR PRINTED]

NAME AND TITLE: \_\_\_\_\_

DATE: \_\_\_\_\_

=====

RETURN THIS PAGE BY MAIL, FAX OR E-MAIL TO:

U.S. DEPARTMENT OF ENERGY  
FEDERAL ENERGY TECHNOLOGY CENTER  
ACQUISITION AND ASSISTANCE DIVISION  
P. O. BOX 10940, MS 921-143  
PITTSBURGH, PENNSYLVANIA 15236-0940

ATTN.: DONA G. SHEEHAN  
PRDA NO. DE-RA26-97BC15029

FAX: (412) 892-6216

E-MAIL: sheehan@fetc.doe.gov

APPENDIX II

DE-RA26-97BC15029

For DOE Use	
Prop No.	Copy No.

VOLUME I - OFFER AND OTHER DOCUMENTS  
U. S. DEPARTMENT OF ENERGY  
PROGRAM RESEARCH & DEVELOPMENT ANNOUNCEMENT

PROPOSAL COVER SHEET/CERTIFICATION

PROJECT TITLE:

PROPOSED DURATION (mos.):

REQUESTED STARTING DATE:

1998

RECOMMENDED PROGRAM CATEGORY: FUNDAMENTAL GEOSCIENCE FOR RESERVOIR  
CHARACTERIZATION

NAME OF SUBMITTING ORGANIZATION: \_\_\_\_\_

ADDRESS (PO Box/Street Address, \_\_\_\_\_  
City, State, Zip Code):

COUNTY: \_\_\_\_\_ CONGRESSIONAL DISTRICT: \_\_\_\_\_

NAME OF PROJECT MANAGER: \_\_\_\_\_

POSITION TITLE: \_\_\_\_\_

AREA CODE/TELEPHONE NO.: \_\_\_\_\_

FACSIMILE NO (AC/#): \_\_\_\_\_

INTERNET ADDRESS: \_\_\_\_\_

- PROPRIETARY INFORMATION: Does this volume contain proprietary or business confidential information (Check One)? ☐ YES ☐ NO  
If your answer is YES, complete the "Notice of Restrictions on Disclosure and Use of Data" below

:

**FAR 52.215-12 RESTRICTION ON DISCLOSURE AND USE OF DATA**

"This proposal, Volume \_\_\_\_\_, includes data that shall not be disclosed outside the Government and shall not be duplicated, used, or disclosed--in whole or in part-- for any purpose other than to evaluate this proposal or quotation. If, however, a contract is awarded to this offeror or quoter as a result of, or in connection with the submission of this data, the Government shall have the right to duplicate, use, or disclose the data to the extent provided in the resulting contract. This restriction does not limit the Government's right to use information contained in this data if it is obtained from another source without restriction. The data subject to this restriction are contained in sheets

\_\_\_\_\_. "  
(insert applicable page numbers)

**In addition, each page of the proposal containing proprietary data shall be marked with the following legend:**

"Use or disclosure of data contained on lines specifically identified by asterisk (\*) are subject to the restriction on the cover page of this proposal."

---

Cost Sharing Certification

I, the undersigned authorized representative for \_\_\_\_\_, (name of organization) for the proposal entitled: " \_\_\_\_\_"  
\_\_\_\_\_

now being submitted to the U.S. Department of Energy for contract award pursuant to Program Research and Development Announcement DE-RA26-97BC15029, do hereby agree to provide a minimum cost share of 20% of total allowable project costs, in accordance with the provisions of this solicitation.

Signature: \_\_\_\_\_  
Name (Typed): \_\_\_\_\_  
Title (Authorized Official): \_\_\_\_\_

Date: \_\_\_\_\_

**The proposal must be signed by a corporate or company official of the proposing organization who is authorized to legally bind the organization to the performance of the ensuing contract award in its entirety.**

**The DOE has no obligation to further review the proposal if this cost-sharing certification is not completed and signed by an authorized official of the proposing organization.**



APPENDIX II

DE-RA26-97BC15029

For DOE Use	
Prop No.	Copy No.

VOLUME II-TECHNICAL  
U. S. DEPARTMENT OF ENERGY  
PROGRAM RESEARCH & DEVELOPMENT ANNOUNCEMENT

PROPOSAL COVER SHEET/CERTIFICATION

PROJECT TITLE:

PROPOSED DURATION (mos.):

REQUESTED STARTING DATE:

1998

RECOMMENDED PROGRAM CATEGORY: FUNDAMENTAL GEOSCIENCE FOR RESERVOIR  
CHARACTERIZATION

NAME OF SUBMITTING ORGANIZATION: \_\_\_\_\_

ADDRESS (PO Box/Street Address, \_\_\_\_\_  
City, State, Zip Code):

COUNTY: \_\_\_\_\_ CONGRESSIONAL DISTRICT: \_\_\_\_\_

NAME OF PROJECT MANAGER: \_\_\_\_\_

POSITION TITLE: \_\_\_\_\_

AREA CODE/TELEPHONE NO.: \_\_\_\_\_

FACSIMILE NO (AC/#): \_\_\_\_\_

INTERNET ADDRESS: \_\_\_\_\_

- PROPRIETARY INFORMATION: Does this volume contain proprietary or business confidential information (Check One)? ☐ YES ☐ NO  
If your answer is YES, complete the "Notice of Restrictions on Disclosure and Use of Data" below:

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Signature: \_\_\_\_\_  
Name (Typed): \_\_\_\_\_  
Title (Authorized Official): \_\_\_\_\_

Date: \_\_\_\_\_

**The proposal must be signed by a corporate or company official of the proposing organization who is authorized to legally bind the organization to the performance of the ensuing contract award in its entirety.**

**The DOE has no obligation to further review the proposal if this cost-sharing certification is not completed and signed by an authorized official of the proposing organization.**

APPENDIX II

DE-RA26-97BC15029

For DOE Use	
Prop No.	Copy No.

VOLUME III - COST  
U. S. DEPARTMENT OF ENERGY  
PROGRAM RESEARCH & DEVELOPMENT ANNOUNCEMENT

PROPOSAL COVER SHEET/CERTIFICATION

PROJECT TITLE:

PROPOSED DURATION (mos.):

REQUESTED STARTING DATE:

1998

RECOMMENDED PROGRAM CATEGORY: FUNDAMENTAL GEOSCIENCE FOR RESERVOIR  
CHARACTERIZATION

NAME OF SUBMITTING ORGANIZATION: \_\_\_\_\_

ADDRESS (PO Box/Street Address, \_\_\_\_\_  
City, State, Zip Code):

COUNTY: \_\_\_\_\_ CONGRESSIONAL DISTRICT: \_\_\_\_\_

NAME OF PROJECT MANAGER: \_\_\_\_\_

POSITION TITLE: \_\_\_\_\_

AREA CODE/TELEPHONE NO.: \_\_\_\_\_

FACSIMILE NO (AC/#): \_\_\_\_\_

INTERNET ADDRESS: \_\_\_\_\_

PROPOSED DURATION (mos.):

REQUESTED STARTING DATE:

1998

- PROPRIETARY INFORMATION: Does this volume contain proprietary or business confidential information (Check One)? ☐ YES ☐ NO  
If your answer is YES, complete the "Notice of Restrictions on Disclosure and Use of Data" below:

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\_\_\_\_\_.  
(insert applicable page numbers)

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Signature: \_\_\_\_\_  
Name (Typed): \_\_\_\_\_  
Title (Authorized Official): \_\_\_\_\_

Date: \_\_\_\_\_

**The proposal must be signed by a corporate or company official of the proposing organization who is authorized to legally bind the organization to the performance of the ensuing contract award in its entirety.**

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APPENDIX II

DE-RA26-97BC15029

For DOE Use	
Prop No.	Copy No.

VOLUME IV - ENVIRONMENTAL  
U. S. DEPARTMENT OF ENERGY  
PROGRAM RESEARCH & DEVELOPMENT ANNOUNCEMENT

PROPOSAL COVER SHEET/CERTIFICATION

PROJECT TITLE:

PROPOSED DURATION (mos.):

REQUESTED STARTING DATE:

1998

RECOMMENDED PROGRAM CATEGORY: FUNDAMENTAL GEOSCIENCE FOR RESERVOIR  
CHARACTERIZATION

NAME OF SUBMITTING ORGANIZATION: \_\_\_\_\_

ADDRESS (PO Box/Street Address, \_\_\_\_\_  
City, State, Zip Code):

COUNTY: \_\_\_\_\_ CONGRESSIONAL DISTRICT: \_\_\_\_\_

NAME OF PROJECT MANAGER: \_\_\_\_\_

POSITION TITLE: \_\_\_\_\_

AREA CODE/TELEPHONE NO.: \_\_\_\_\_

FACSIMILE NO (AC/#): \_\_\_\_\_

INTERNET ADDRESS: \_\_\_\_\_

- PROPRIETARY INFORMATION: Does this volume contain proprietary or business confidential information (Check One)? ☐ YES ☐ NO  
If your answer is YES, complete the "Notice of Restrictions on Disclosure and Use of Data" below:

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(insert applicable page numbers)

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Cost Sharing Certification

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\_\_\_\_\_

now being submitted to the U.S. Department of Energy for contract award pursuant to Program Research and Development Announcement DE-RA26-97BC15029, do hereby agree to provide a minimum cost share of 20% of total allowable project costs, in accordance with the provisions of this solicitation.

Signature: \_\_\_\_\_  
Name (Typed): \_\_\_\_\_  
Title (Authorized Official): \_\_\_\_\_

Date: \_\_\_\_\_

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## PROJECT TITLE

OFFEROR'S PROGRAM MANAGER'S NAME AND TITLE

This image shows a blank sheet of white paper with horizontal ruling lines. The lines are evenly spaced and extend across the width of the page. There are no margins, text, or other markings on the paper.

(Note: This format is provided as an example only)

## CONTRACT PRICING PROPOSAL COVER SHEET

1. SOLICITATION / CONTRACT / MODIFICATION NO.  
DE-RA26-97BC15029FORM APPROVED OMB NO.  
**9000-0013**

Public reporting burden for this collection of information is estimated to average 4 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the FAR Secretariat (VRS), Office of Federal Acquisition Policy, GSA, Washington, D.C. 20405; and to the Office of Management and Budget, Paperwork Reduction Project (9000-0013), Washington, D.C. 20503.

2. NAME AND ADDRESS OF OFFEROR (Include ZIP Code)	3A. NAME/TITLE OF OFFEROR'S POINT OF CONTACT		3B. TELEPHONE NO.
	4. TYPE OF CONTRACT ACTION (Check)		
	A. NEW CONTRACT		D. LETTER CONTRACT
	B. CHANGE ORDER		E. UNPRICED ORDER
	C. PRICE REV/REDETERMINATION	<input checked="" type="checkbox"/>	F. OTHER (Specify) - PROPOSAL
5. TYPE OF CONTRACT: COST SHARE		6. PROPOSED COST (A + B = C)	
A. COST TO DOE		B. COST-SHARE	C. TOTAL COST
\$			\$

7. PLACE(S) AND PERIOD(S) OF PERFORMANCE

8. List and reference the identification, quantity and total price proposed for each contract line item. A line item cost breakdown supporting this recap is required unless otherwise specified by the Contracting Officer. (Continue on reverse, and then on plain paper, if necessary, use same headings.)

A. LINE ITEM NO.	B. IDENTIFICATION	C. QUANTITY	D. TOTAL PRICE	E. REF.

9. PROVIDE NAME, ADDRESS, AND TELEPHONE NUMBER FOR THE FOLLOWING (If available)

A. CONTRACT ADMINISTRATION OFFICE		B. AUDIT OFFICE	
10. WILL YOU REQUIRE THE USE OF ANY GOVERNMENT PROPERTY IN THE PERFORMANCE OF THIS WORK? (If "yes," identify)  <input type="checkbox"/> YES <input type="checkbox"/> NO	11A. DO YOU REQUIRE GOVERNMENT CONTRACT FINANCING TO PERFORM THIS PROPOSED CONTRACT? (If "Yes," complete Item 11B) <input type="checkbox"/> YES <input type="checkbox"/> NO	11B. TYPE OF FINANCING ( <input checked="" type="checkbox"/> one) <input type="checkbox"/> ADVANCE <input type="checkbox"/> PROGRESS PAYMENTS PAYMENTS <input type="checkbox"/> GUARANTEED LOANS	
12. HAVE YOU BEEN AWARDED ANY CONTRACTS OR SUBCONTRACTS FOR THE SAME OR SIMILAR ITEMS WITHIN THE PAST 3 YEARS? (If "Yes," identify item(s), customer(s) and contract number(s)) <input type="checkbox"/> YES <input type="checkbox"/> NO	13. IS THIS PROPOSAL CONSISTENT WITH YOUR ESTABLISHED ESTIMATING AND ACCOUNTING PRACTICES AND PROCEDURES AND FAR PART 31, COST PRINCIPLES? (If "No," explain) <input type="checkbox"/> YES <input type="checkbox"/> NO		
14. COST ACCOUNTING STANDARDS BOARD (CASB) DATA (Public Law 91-379 as amended and FAR PART 30)			
A. WILL THIS CONTRACT ACTION BE SUBJECT TO CASB REGULATIONS? (If "No," explain in proposal) <input type="checkbox"/> YES <input type="checkbox"/> NO	B. HAVE YOU SUBMITTED A CASB DISCLOSURE STATEMENT (CASB DS-1 OR 2)? (If "Yes," specify in proposal the office to which submitted and if determined to be adequate) <input type="checkbox"/> YES <input type="checkbox"/> NO		
C. HAVE YOU BEEN NOTIFIED THAT YOU ARE OR MAY BE IN NON-COMPLIANCE WITH YOUR DISCLOSURE STATEMENT OR COST ACCOUNTING STANDARDS? (If "Yes," explain in proposal) <input type="checkbox"/> YES <input type="checkbox"/> NO	D. IS ANY ASPECT OF THIS PROPOSAL INCONSISTENT WITH YOUR DISCLOSED PRACTICES OR APPLICABLE COST ACCOUNTING STANDARDS? (If "Yes," explain in proposal) <input type="checkbox"/> YES <input type="checkbox"/> NO		

This proposal is submitted in response to the solicitation, contract, modification, etc. in Item 1 and reflects our best estimates and / or actual costs as of this date and conforms with the instructions in FAR 15.804-6(b)(1), Table 15-2. The offeror, if selected for negotiation, grants the contracting officer or authorized representative the right to examine, at any time before award, those books, records, documents and other types of factual information, regardless of form or whether such supporting information is specifically referenced or included in the proposal as the basis for pricing, that will permit an adequate evaluation of the proposed price.

15. NAME AND TITLE (Type)	16. NAME OF FIRM
17. SIGNATURE	18. DATE OF SUBMISSION



**TABLE OF CONTENTS**

STANDARD FORM 1411	CONTRACT PRICING PROPOSAL COVER SHEET
FAR 15.804-6	INSTRUCTIONS FOR SUBMISSION OF A COST PROPOSAL

**FETC GUIDE FOR CONTRACT PRICING PROPOSAL PREPARATION**

EXHIBIT A, ATTACHMENT 1	DEFINITIONS
EXHIBIT B-1	SUMMARY OF COST ELEMENTS BY TASK AND FOR TOTAL PROJECT
EXHIBIT B-2	SUMMARY OF COST ELEMENTS BY TASK AND FOR OFFEROR'S FISCAL YEAR 19__
EXHIBIT C	SUMMARY OF DIRECT MATERIALS AND/OR EQUIPMENT BY TASK AND OFFEROR'S FISCAL YEAR 19__
EXHIBIT D-1	SUMMARY OF DIRECT LABOR BY TASK AND OFFEROR'S FISCAL YEAR 19__
EXHIBIT D-2	SUMMARY OF DIRECT LABOR HOURS BY TASK
EXHIBIT E	SUMMARY OF TRAVEL BY TASK AND OFFEROR'S FISCAL YEAR
EXHIBIT F	SUMMARY OF DIRECT COSTS BY TASK AND OFFEROR'S FISCAL YEAR
EXHIBIT G-1	SUMMARY OF INDIRECT EXPENSES
EXHIBIT G-2	SUMMARY OF PROPOSED INDIRECT RATES
EXHIBIT H	SUMMARY OF ESCALATION FACTORS/PERCENTAGES BY COST ELEMENT
EXHIBIT I	INDEPENDENT RESEARCH AND DEVELOPMENT (R&D) OR BID AND PROPOSAL (B&P) COSTS
EXHIBIT J	PRE-AWARD ACCOUNTING SYSTEM SURVEY

## TABLE 15-2 INSTRUCTIONS FOR SUBMISSION OF A CONTRACT PRICING PROPOSAL

The SF1411 provides a cover sheet for use by offerors to submit to the Government a pricing proposal of estimated and/or incurred costs only when cost or pricing data are required.

1. The pricing proposal shall be segregated by contract line item with sufficient detail to permit cost analysis. Attach cost-element breakdowns, using the applicable format prescribed in Item 8A, B, or C of this section for each proposed line item. These breakdowns must conform to the instructions in the solicitation and any specific requirements established by the Contracting Officer. Furnish supporting breakdowns for each cost element, consistent with the offeror's cost accounting system.

When more than one contract line item is proposed, summary total amounts covering all line items must be furnished for each cost element. If agreement has been reached with Government representatives on use of forward pricing rates/factors, identify the agreement, include a copy, and describe its nature. Depending on offeror's system, breakdowns shall be provided for the following basic elements of cost, as applicable:

**MATERIALS**--Provide a consolidated priced summary of individual material quantities included in the various tasks, orders, or contract line items being proposed and the basis for pricing (vendor quotes, invoice prices, etc.). Include raw materials, parts, components, assemblies, and services to be produced or performed by others. For all items proposed, identify the item and show the source, quantity and price.

**Competitive Methods**--For those acquisitions, e.g., subcontracts, purchase orders, material orders, etc.) exceeding the pertinent threshold set forth at FAR 15.804-2(a)(1) priced on a competitive basis, also provide data showing degree of competition, and the basis for establishing the source and the reasonableness of the price. For interorganizational transfers priced at other than cost of the comparable competitive commercial work of the division, subsidiary or affiliate of the contractor, explain the pricing method (see FAR 31.205-26(e)).

**Prices Set by Law or Regulation or Commercial Item Exception**--When an exemption from the requirement to submit cost or pricing data is claimed, whether the item was produced by others or by the offeror, provide justification for the exemption.

**Non-competitive Methods**--For those acquisitions, e.g., subcontracts, purchase orders, material orders, etc.) exceeding the pertinent threshold set forth at FAR 15.804-2(a)(1) priced on a noncompetitive basis, also provide data showing the basis for establishing source and reasonableness of price. For standard commercial items fabricated by the offeror that are generally stocked in inventory, provide a separate cost breakdown of cost by elements. As required by FAR 15.805-2(a), provide a copy of cost or pricing data submitted by the prospective source in support of each subcontract, or purchase order that is either (i) \$1,000,000 or more, or (ii) both more than the pertinent threshold set forth in FAR 15.804-2(a)(1)(iii) and (iv) and more than 10 percent of the contractor's proposed price. The Contracting Officer may require submission of cost or pricing data in support of proposals in lower amounts. Submit the results of the analysis of the prospective source's proposal as required by FAR 15.806. When the submission of a prospective source's cost or pricing data is required as described above, it shall be included as part of the offeror's initial pricing proposal.

**DIRECT LABOR**--Provide a time-phased (e.g., monthly, quarterly, etc.) breakdown of labor hours, rates, and cost by appropriate category, and furnish bases for estimates.

**INDIRECT COSTS**--Indicate how offeror has computed and applied offeror's indirect costs, including cost breakdowns, and showing trends and budgetary data, to provide a basis for evaluating the reasonableness of proposed rates. Indicate the rates used and provide an appropriate explanation.

**OTHER COSTS**--List all other costs not otherwise included in the categories described above (e.g., special tooling, travel, computer and consultant services, preservation, packaging and packing, spoilage and rework, and Federal excise tax on finished articles) and provide bases for pricing.

**ROYALTIES**--If more than \$250, provide the following information on a separate page for each separate royalty or license fee: name and address of licensor; date of license agreement; patent numbers, patent application serial numbers, or other basis on which the royalty is payable; brief description (including any part or model numbers of each contract item or component on which the royalty is payable); percentage or dollar rate of royalty per unit; unit price of contract item; number of units; and total dollar amount of royalties. In addition, if specifically requested by the contracting officer, provide a copy of the current license agreement and identification of applicable claims of specific patents. (See FAR 27.204 and 31.205-37.)

**FACILITIES CAPITAL COST OF MONEY (FCCOM)**--When the offeror elects to claim facilities capital cost of money as an allowable cost, the offeror must submit Form CASB-CMF and show the calculation of the proposed amount (see FAR 31.205-10).

2. As part of the specific information required, the offeror must submit with offeror's proposal, and clearly identify as such, cost or pricing data (that is, data that are verifiable and factual and otherwise as defined at FAR 15.801). In addition, submit with offeror's proposal any information reasonably required to explain offeror's estimating process, including

- a. The judgmental factors applied and the mathematical or other methods used in the estimate, including those used in projecting from known data; and
- b. The nature and amount of any contingencies included in the proposed price.

3. Whenever the offeror has incurred costs for work performed before submission of proposal, those costs must be identified in the offeror's cost/price proposal.

4. There is a clear distinction between submitting cost or pricing data and merely making available books, records, and other documents without identification. The requirement for submission of cost or pricing data is met when all accurate cost or pricing data reasonably available to the offeror have been submitted, either actually or by specific identification, to the contracting officer or an authorized representative. As later information comes into the offeror's possession, it should be promptly submitted to the contracting officer. The requirement for submission of cost or pricing data continues up to the time of final agreement on price, or another date agreed upon between the parties, if applicable.

5. In submitting offeror's proposal, offeror must include an index, appropriately referenced, of all the cost or pricing data and information accompanying or identified in the proposal. In addition, any future additions and/or revisions, up to the date of agreement on price, must be annotated on a supplemental index.

6. By submitting offeror's proposal, the offeror, if selected for negotiation, grants the contracting officer or an authorized representative the right to examine, at any time before award, those books, records, documents, and other types of factual information, regardless of form or whether such supporting information is specifically referenced or included in the proposal as the basis for pricing, that will permit adequate evaluation of the proposed price.

7. As soon as practicable after final agreement on price, but before the award resulting from the proposal, the offeror shall, under the conditions stated in FAR 15.804-4, submit a Certificate of Current Cost or Pricing Data.

8. HEADINGS FOR SUBMISSION OF LINE-ITEM SUMMARIES:

A. New Contracts (including Letter contracts).

COST ELEMENTS	PROPOSED CONTRACT ESTIMATE—TOTAL COST	PROPOSED CONTRACT ESTIMATE—UNIT COST	REFERENCE
(1)	(2)	(3)	(4)

Under Column (1)—Enter appropriate cost elements.

Under Column (2)—Enter those necessary and reasonable costs that in offeror's judgment will properly be incurred in efficient contract performance. When any of the costs in this column have already been incurred (e.g., under a letter contract or unpriced order), describe them on an attached supporting schedule. When preproduction or startup costs are significant, or when specifically requested to do so by the contracting officer, provide a full identification and explanation of them.

Under Column (3)—Optional, unless required by the contracting officer.

Under Column (4)—Identify the attachment in which the information supporting the specific cost element may be found. Attach separate pages as necessary.

B. Change Orders, Modifications and Claims

COST ELEMENTS	ESTIMATED COST OF ALL WORK DELETED	COST OF DELETED WORK ALREADY PERFORMED	NET COST TO BE DELETED	COST OF WORK ADDED	NET COST OF CHANGE	REFERENCE
(1)	(2)	(3)	(4)	(5)	(6)	(7)

Under Column (1)—Enter appropriate cost elements.

Under Column (2)—Include current estimates of what the cost would have been to complete the deleted work not yet performed, and (ii) the cost of deleted work already performed (not the original proposal estimates) and the cost of deleted work already performed.

Under Column (3)—Include the incurred cost of deleted work already performed, actually computed if possible, or estimated in the contractor's accounting records. Attach a detailed inventory of work, materials, parts, components, and hardware already purchased, manufactured or performed and deleted by the change, indicating the cost and proposed disposition of each line item. Also, if the offeror desires to retain these items or any portions of them, indicate the amount offered for them.

Under Column (4)—Enter the net cost to be deleted which is the estimated cost of all deleted work less the cost of deleted work already performed. (Column (2) less Column (3) = Column (4).)

Under Column (5)—Enter the offeror's estimate for cost of work added by the change. When nonrecurring costs are significant, or when specifically requested to do so by the Contracting Officer, provide a full identification and explanation of them. When any of the costs in this column have already been incurred, describe them on an attached supporting schedule.

Under Column (6)—Enter the net cost of change which is the cost of work added, less the net cost to be deleted. When this result is negative, place the amount in parentheses. (Column (4) less Column (5) = Column (6).)

Under Column (7)—Identify the attachment in which the information supporting the specific cost element may be found. Attach separate pages as necessary.

C. Price Revision/Redetermination

CUTOFF DATE	NUMBER OF UNITS COMPLETED	NUMBER OR UNITS TO BE COMPLETED	CONTRACT AMOUNT	REDETERMINATION PROPOSAL AMOUNT	DIFFERENCE
(1)	(2)	(3)	(4)	(5)	(6)

COST ELEMENTS	INCURRED COST--PREPRODUCTION	INCURRED COST--COMPLETED UNITS	INCURRED COST--WORK IN PROCESS	TOTAL INCURRED COST	ESTIMATED COST TO COMPLETE	ESTIMATED TOTAL COST	REFERENCE
(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)

Under Column (1)--Enter the cutoff date required by the contract, if applicable.

Under Column (2)--Enter the number of units completed during the period for which experienced costs of production are being submitted.

Under Column (3)--Enter the number of units remaining to be completed under the contract.

Under Column (4)--Enter the cumulative contract amount.

Under Column (5)--Enter the offeror's redetermination proposal amount.

Under Column (6)--Enter the difference between the contract amount and the redetermination proposal amount. When this result is negative, place the amount in parentheses. (Column (4) less Column (5) = Column (6).)

Under Column (7)--Enter appropriate cost elements. When residual inventory exists, the final costs established under fixed-price incentive and fixed-price redeterminable arrangements should be net of the fair market value of such inventory. In support of subcontract costs, submit a listing of all subcontracts subject to repricing action, annotated as to their status.

Under Column (8)--Enter all costs incurred under the contract before starting production and other nonrecurring costs (usually referred to as startup costs) from offeror's books and records as of the cutoff date. These include such costs as preproduction engineering, special plant rearrangement, training program, and any identifiable nonrecurring costs such as initial rework, spoilage, pilot runs, etc. In the event the amounts are not segregated in or otherwise available from the offeror's records, enter in this column offeror's best estimates. Explain the basis for each estimate and how the costs are charged on offeror's accounting record (e.g., included in production costs as direct engineering labor, charged to manufacturing overhead, etc.). Also show how the costs would be allocated to the units at their various stages of contract completion.

Under Columns (9) and (10)--Enter in Column (9) the production costs from offeror's books and records (exclusive of preproduction costs reported in Column (8)) of the units completed as of the cutoff date. Enter in Column (10) the costs of work in process as determined from offeror's records or inventories at the cutoff date. When the amounts for work in process are not available in contractor's records but reliable estimates for them can be made, enter the estimated amounts in Column (10) and enter in Column (9) the differences between the total incurred costs (exclusive of preproduction costs) as of the cutoff date and these estimates. Explain the basis for the estimates, including identification of any provision for experienced or anticipated allowances such as shrinkage, rework, design changes, etc.. Furnish experienced unit or lot costs (or labor hours) from inception of contract to the cutoff date, improvement curves, and any other available production cost history pertaining to the item(s) to which the offeror's proposal relates.

Under Column (11)--Enter total incurred costs. (Total of Columns(8), (9), and (10).)

Under Column (12)--Enter those necessary and reasonable costs that in contractor's judgement will properly be incurred in completing the remaining work to be performed under the contracts with respect to the item(s) to which contractor's proposal relates.

Under Column (13)--Enter the total estimated cost. (Total of Columns (11) and (12).)

Under Column (14)--Identify the attachment in which the information supporting the specific cost element may be found. Attach separate pages as necessary.

**TABLE 15-3 INSTRUCTIONS FOR SUBMISSION OF INFORMATION  
OTHER THAN COST OR PRICING DATA**

SF 1448 is a cover sheet for use by offerors to submit information to the Government when cost or pricing data are not required but the Contracting Officer has requested information to help establish price reasonableness or cost realism. Such information is not considered cost or pricing data, and shall not be certified in accordance with 15.804-4.

1. The information submitted shall be at the level of detail described in the solicitation or specified by the Contracting Officer. The offeror's own format is acceptable unless the Contracting Officer determines that use of a specified format is essential.

A. If adequate price competition is expected, the information shall include cost or technical information necessary to determine the cost realism and adequacy of the offeror's proposal, e.g. information adequate to validate that the proposed costs are consistent with the technical proposal, or cost breakdowns to help unrealistically priced proposals.

B. If the offer is expected to be at or below the cost or pricing data threshold, and adequate price competition is not expected, the information may consist of data to permit the Contracting Officer and authorized representatives to determine price reasonableness, e.g., information to support an analysis of material costs (when sufficient information on labor and overhead rates is already available), or information on prices and quantities at which the offeror has previously sold the same or similar items.

2. Any information submitted must support the price proposed. Include sufficient detail or cross references to clearly establish the relationship of the information provided to the price proposed. Support any information provided by explanations or supporting rationale as needed to permit the Contracting Officer and authorized representatives to evaluate the documentation.

EXHIBIT A  
GUIDE FOR CONTRACT PRICING PROPOSAL PREPARATION

The instructions and footnotes contained on pages 2, 3 and 4 of the SF-1411 are the basic criteria for proposal preparation. However, to highlight the areas of primary concern, the following is provided:

1. Quantities Proposed - All Categories: Provide the basis for the proposed quantities of material and labor hours such as current usage, prior history, engineering estimates, etc.
2. Material Prices: Explain the basis for the proposed prices, such as written quotes, catalogue prices, prior invoices, shop estimates, etc. Where appropriate, identify the source of the data and provide the date and information for multiple quotes.
3. Direct Labor Rates: Provide the basis for the proposed hourly rates. For example, the rates are actual rates or averages of actual rates for the labor category(s) proposed, paid as of a given date. If a factor is included to provide for known or anticipated increases, identify the factor and basis. If a factor for fringe benefits is included, e.g. vacations, it should be stated separately.
4. Overhead Rates: Explain how the rates were derived. Describe the methods of computation, including cost element breakdown, prior actual data, projected budgetary data, etc. to facilitate analysis of the pool of expenses and the base cost used to develop the rate. If agreement has been reached with another governmental organization for the use of provisional rates, submit a copy of the approved rate agreement.
5. Special Equipment: Provide information similar to that required for material (item 2 above).
6. Travel: Each trip must be itemized. List the destination, number of travelers, and length of the trip; and provide the rates used to estimate costs for airfare, lodging, meals, local transportation, and any incidentals.
7. Consultants: Indicate whether a firm or an individual is involved. Provide the hourly/daily rate along with the basis for the rate, and certify whether or not the proposed rate is the consultant's "most favored customer" rate. Furnish resumes or similar information regarding qualifications or experience. If travel or incidental expenses are to be charged, give the basis for these costs.
8. Other Direct Costs: The amount and basis for proposed costs not otherwise shown should be included here. For example, the number of hours and hourly charge for any computer time might be included.
9. General and Administrative (G&A) Expense: Provide information similar to that required for overhead costs (item 4 above).

## SUMMARY OF COST ELEMENTS BY TASK AND FOR TOTAL PROJECT

<u>COST ELEMENTS:</u>	<u>Task No.</u>	<u>Task No.</u>	<u>Task No.</u>	<u>Total Project</u>
1. Direct Material				
A) Purchased Parts				
B) Subcontracted Items				
C) Other				
Total Direct Materials				
2. Material Overhead				
3. Direct Labor				
4. Labor Overhead				
5. Special Testing				
6. Special Equipment				
7. Travel				
8. Consultants				
9. Other Direct Costs				
10. <b>Total Direct Cost and Overhead</b>				
11. General & Administrative Expense				
12. Facilities Capital Cost of Money				
13. <b>Total Estimated Cost</b>				
14. Fee				
15. Cost Sharing				
16. <b>Total Estimated DOE Funds Required</b>				

## APPENDIX IV

## EXHIBIT B-2

## SUMMARY OF COST ELEMENTS BY TASK FOR OFFEROR'S FISCAL YEAR 19\_\_\_\_

<u>COST ELEMENTS:</u>	<u>Task No.</u>	<u>Task No.</u>	<u>Task No.</u>	<u>Fiscal Year Total</u>
1. Direct Material				
A) Purchased Parts				
B) Subcontracted Items				
C) Other				
Total Direct Materials				
2. Material Overhead				
3. Direct Labor				
4. Labor Overhead				
5. Special Testing				
6. Special Equipment				
7. Travel				
8. Consultants				
9. Other Direct Costs				
10. <b>Total Direct Cost and Overhead</b>				
11. General & Administrative Expense				
12. Facilities Capital Cost of Money				
13. <b>Total Estimated Cost</b>				
14. Fee				
15. Cost Sharing				
16. <b>Total Estimated DOE Funds Required</b>				

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NOTE: An Exhibit B-2 shall be provided for each of the offeror's fiscal years (or portion thereof) in which the project is to be performed.

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## APPENDIX IV

## EXHIBIT C

## SUMMARY OF DIRECT MATERIALS AND/OR EQUIPMENT BY TASK AND OFFEROR'S FISCAL YEAR

<u>Item Description</u>	<u>Quantity</u>	<u>Unit Cost</u>	<u>Total Cost</u>	<u>Basis for Proposed Costs</u>
ITEMIZE PROPOSED MATERIALS TO COINCIDE WITH THE MATERIALS LINE ON THE EXHIBIT B-2 COST SUMMARIES BY TASK.		\$	\$	
SIMILARLY, ANY PROPOSED SPECIAL EQUIPMENT SHOULD BE ITEMIZED SO THAT TASK TOTALS TIE INTO THE SPECIAL EQUIPMENT LINE ON THE EXHIBIT B-2 COST SUMMARIES.				
Total Cost			\$	

IN THE "SOURCE OF COST DATA" COLUMN, IDENTIFY THE BASIS FOR THE PROPOSED TERMS, SUCH AS WRITTEN QUOTES, ENGINEERING ESTIMATES, PRIOR INVOICES, CATALOGUE PRICES, ETC.

WHERE APPROPRIATE, ALSO IDENTIFY THE VENDOR AND DATE THE INFORMATION WAS OBTAINED.

TASK NO.:\_\_\_\_\_

FISCAL PERIOD: \_\_\_\_\_

Provide the above information for EACH TASK in EACH FISCAL PERIOD as provided in Exhibit B-2, so that the trail between these two exhibits is easy to follow.

## APPENDIX IV

## EXHIBIT D-2

SUMMARY OF DIRECT LABOR HOURS BY TASK					
LABOR CATEGORY:	Task No.	Task No.	Task No.	Task No.	Total
Prime Contractor:					
Category 1					
Category 2					
Category 3					
Etc.					
Subtotal	_____	_____	_____	_____	_____
Subcontractor A:					
Category 1					
Category 2					
Category 3					
Etc.					
Subtotal	_____	_____	_____	_____	_____
Subcontractor B:					
Category 1					
Category 2					
Category 3					
Etc.					
Subtotal	_____	_____	_____	_____	_____
Consultant A:					
Category 1					
Category 2					
Category 3					
Etc.					
Subtotal	_____	_____	_____	_____	_____
Grand Total	=====	=====	=====	=====	=====

## SUMMARY OF TRAVEL BY TASK AND OFFEROR'S FISCAL YEAR

<u>Fiscal</u>	<u>Destination</u>	<u>Roundtrip</u>	<u>Ground</u>	<u>Daily Per</u>	<u>Daily Car</u>
<u>Year</u>		<u>Airfare</u>	<u>Transportation</u>	<u>Diem Rate</u>	<u>Rental Rate</u>

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IN THIS SECTION, PROVIDE THE RATES USED TO CALCULATE AIRFARE, GROUND TRANSPORTATION, PER DIEM (WHICH INCLUDES SUBSISTENCE, MEALS AND INCIDENTAL EXPENSES) AND CAR RENTAL.

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<u>Task</u>	<u>Fiscal</u>	<u>Number of</u>	<u>Total</u>	<u>Total</u>	<u>Total</u>	<u>Total</u>
<u>Year</u>	<u>Destination</u>	<u>Trips/People/Days</u>	<u>Airfare</u>	<u>Per diem</u>	<u>Car</u>	<u>Travel</u>
					<u>Rental</u>	<u>Cost</u>

---

IN THIS SECTION, SHOW TOTAL COSTS FOR EACH OF THE TRAVEL COMPONENTS BASED ON USAGE OF THE RATES SHOWN ABOVE, I.E., THE NUMBER OF TRIPS AND PEOPLE AND DAYS APPLIED TO THE APPROPRIATE RATES ABOVE SHOULD RESULT IN THE TOTAL COSTS. THE TOTAL COST PER TASK SHOULD MATCH THE TRAVEL LINE ON THE EXHIBIT B-2 COST SUMMARIES.

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## SUMMARY OF OTHER DIRECT COSTS BY TASK AND OFFEROR'S FISCAL YEAR

<u>Description of Cost</u>	<u>Number of Units/Hours/etc.</u>	<u>Rate per Unit/Hour/etc.</u>	<u>Total Cost</u>
<hr/> <p>SPECIFY BOTH THE QUANTITY AND THE MEASURE; FOR EXAMPLE, 100 HOURS OR 2 DAYS.</p> <hr/>			
			<hr/> <p>\$</p> <hr/>
<hr/> <p>THE TOTAL COST BY TASK SHOULD TIE INTO THE OTHER DIRECT COSTS LINE ON THE EXHIBIT B-2 COST SUMMARIES.</p> <hr/>			
<hr/> <p>NOTE: THIS SAME FORMAT SHOULD BE USED TO IDENTIFY ANY CONSULTANT COSTS PROPOSED. THE NUMBER OF DAYS OR HOURS AND THE RATE CAN BE ITEMIZED FOR EACH INDIVIDUAL CONSULTANT.</p> <hr/>			

## SUMMARY OF INDIRECT EXPENSES

<u>Overhead Category</u>	<u>Previous Fiscal Year Base Pool FY: _____</u>	<u>Current Fiscal Year Base Pool FY: _____</u>	<u>Next Fiscal Year Base Pool FY: _____</u>
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IMPORTANT NOTES:

- (1) SUBMIT A SEPARATE EXHIBIT G-1 FOR EACH OF YOUR COMPANY'S INDIRECT COST POOLS.
  - (2) FOR EACH POOL, PROVIDE A BREAKDOWN BY EXPENSE ACCOUNT. SEE EXAMPLES ON THE FOLLOWING PAGES. EXAMPLES ARE PROVIDED SOLELY TO INDICATE AN ACCEPTABLE FORMAT FOR THIS EXHIBIT--DO NOT ATTEMPT TO CONFORM YOUR ACCOUNTS TO THOSE LISTED IN THE EXAMPLES.
- 

Base for Allocation:

\_\_\_\_\_ \$ \_\_\_\_\_

OFFEROR'S FISCAL YEAR: Beginning:\_\_\_\_\_ Ending:\_\_\_\_\_

# FOR EXAMPLE ONLY

## SUMMARY OF INDIRECT EXPENSES

Overhead Category: Material Overhead

<u>Account Title</u>	<u>Previous Fiscal Year Base Pool FY: 19xx</u>	<u>Current Fiscal Year Base Pool* FY: 19xx</u>	<u>Next Fiscal Year Base Pool FY: 19xx</u>
Indirect Labor	\$ 823,833	\$ 864,327	\$ 1,125,500
Additional Compensation	31,000	34,392	41,225
Overtime Premium	5,010	5,263	5,500
Holidays	26,812	28,100	41,340
Sick Leave	20,768	22,018	33,750
Suggestion Awards	15	125	150
Vacations	43,607	45,734	56,250
Maintenance - Outside Services	165	192	200
Other Outside Services	78	76	75
Payroll Taxes	74,587	78,669	102,275
Travel	37,741	36,535	37,500
Dues and Subscriptions	651	651	651
Pension Fund	26,068	27,117	30,700
Operating Supplies	12,694	14,156	15,450
Stationery, Printing, & Operating Supplies	10,210	10,162	10,750
Telephone	19,184	20,322	21,500
Heat, Light, and Power	158,997	170,004	175,000
Depreciation	<u>79,554</u>	<u>79,554</u>	<u>79,554</u>
Total Expense Pool (A)	\$ 1,370,974	\$ 1,437,397	\$ 1,777,370
Allocation Base:			
Direct Materials (B)	\$25,878,940	\$28,466,900	\$31,313,600
Material Overhead Rate (A) / (B)	5.3%	5.0%	5.7%

\* Includes two months budgetary estimate.

OFFEROR'S FISCAL YEAR: Beginning: April 1      Ending: March 31

# FOR EXAMPLE ONLY

## SUMMARY OF INDIRECT EXPENSES

Overhead Category: Labor Overhead

<u>Account Title</u>	Previous Fiscal Year Base Pool <u>FY: 19xx</u>	Current Fiscal Year Base Pool* <u>FY: 19xx</u>	Next Fiscal Year Base Pool <u>FY: 19xx</u>
Indirect Payroll	\$ 264,909	\$ 256,213	\$ 260,000
Payroll Taxes	226,249	227,698	228,000
Vacation	118,710	119,872	120,000
Holidays	109,506	109,772	110,000
Sick Leave	49,962	50,013	50,000
Pensions	170,729	172,079	171,000
Employee Morale	4,073	4,987	5,000
Office Equipment	7,201	7,562	7,000
Depreciation	5,006	4,736	5,000
Subscriptions	1,397	1,488	1,500
Travel	20,557	19,724	22,000
Miscellaneous	1,513	1,987	2,000
Stationery	5,706	6,201	6,000
Reproduction	16,714	17,945	17,000
Maintenance	5,197	5,791	5,000
Rent	200,025	201,218	202,000
Telephone	10,538	10,712	11,000
Insurance	<u>93,786</u>	<u>90,758</u>	<u>102,000</u>
Total Expense Pool (A)	\$1,311,778	\$1,308,756	\$1,324,500
Allocation Base:			
Direct Labor (B)	\$2,398,541	\$2,460,872	\$2,336,000
Labor Overhead			
Rate (A) / (B)	54.7%	53.2%	56.7%

\* Includes two months budgetary estimate.

OFFEROR'S FISCAL YEAR: Beginning: April 1      Ending: March 31



# FOR EXAMPLE ONLY

## SUMMARY OF INDIRECT EXPENSES

Overhead Category: G&A Expense

<u>Account Title</u>	<u>Previous Fiscal Year Base Pool FY: 19xx</u>	<u>Current Fiscal Year Base Pool* FY: 19xx</u>	<u>Next Fiscal Year Base Pool FY: 19xx</u>
Payroll Taxes	\$ 54,909	\$ 56,213	\$ 56,800
Officers' Salaries	566,249	579,698	586,000
Indirect Salaries	1,407,100	1,458,724	1,460,500
Interest	63,506	63,772	60,500
Vacation	80,637	81,398	82,525
Holidays	49,962	50,013	49,500
Sick Leave	34,875	32,937	32,500
Contributions	15,743	13,289	15,000
Pensions	50,729	52,079	53,500
Office Equipment	30,541	27,942	26,750
Depreciation	30,557	29,724	29,000
Travel	62,513	64,987	67,000
Miscellaneous	30,706	41,201	43,250
Legal Fees	16,714	10,945	15,000
Accounting Fees	21,197	23,791	22,500
Computer	24,025	27,218	29,000
Rent	60,538	62,712	65,000
Advertising	13,786	10,758	12,500
Telephone	59,105	61,372	65,000
Insurance	<u>13,844</u>	<u>15,473</u>	<u>15,500</u>
Total Pool	\$ 2,687,236	\$ 2,764,246	\$ 2,787,325
Independent Research**	932,940	826,842	920,000
B&P	<u>743,902</u>	<u>526,209</u>	<u>700,000</u>
Total G&A Expenses	\$ 4,364,078	\$ 4,117,297	\$ 4,407,325
Less unallowables:			
Interest	63,506	63,772	60,500
Contributions	15,743	13,289	15,000
Advertising	<u>13,786</u>	<u>10,758</u>	<u>12,500</u>
Total Unallowables	<u>\$ 93,035</u>	<u>\$ 87,819</u>	<u>\$ 88,000</u>
Net Allowable			
G&A Expenses (A)	\$ 4,271,043	\$ 4,029,478	\$ 4,319,325
Allocation Base:			
Total Cost Input (B)	\$50,993,247	\$52,932,479	\$53,549,800
G&A Rate (A) / (B)	8.4%	7.6%	8.1%

\* Includes two months budgetary estimate.

\*\* If there are advance agreements, the explanation should so reference. Latest actual and estimated program expenditures and allocation bases should be provided.

OFFEROR'S FISCAL YEAR: Beginning: April 1      Ending: March 31

## SUMMARY OF PROPOSED INDIRECT RATES

<u>Indirect Rate Category</u>	<u>Fiscal Year 19xx</u>	<u>Fiscal Year 19xx</u>	<u>Fiscal Year 19xx</u>
-------------------------------	---------------------------------	---------------------------------	---------------------------------

NOTE: LIST ALL INDIRECT CATEGORIES  
CONTAINED IN YOUR PROPOSAL (I.E.,  
MATERIAL OVERHEAD, LABOR  
OVERHEAD, FRINGE BENEFITS, G&A  
EXPENSE, ETC.)

IDENTIFY PERCENTAGES OR FACTORS: DO NOT LIST  
DOLLAR AMOUNTS.

IF THE "NEXT FISCAL YEAR" RATE FROM EXHIBIT G-1 DIFFERS FROM RATES SHOWN  
ABOVE COVERING THE ENTIRE PERIOD OF PERFORMANCE, THEN ADDITIONAL EXHIBIT  
G-1 EXPENSE POOL AND ALLOCATION BASE DATA MUST BE PREPARED SO THAT ALL  
PROPOSED RATES ARE FULLY SUPPORTED.

## SUMMARY OF ESCALATION FACTORS/PERCENTAGES BY COST ELEMENT

<u>Cost Element</u>	<u>Fiscal Year</u>	<u>Fiscal Year</u>	<u>Fiscal Year</u>
---------------------	------------------------	------------------------	------------------------

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NOTE: LIST EACH COST ELEMENT  
(I.E., MATERIALS, LABOR, TRAVEL,  
ETC.) THAT IS ESCALATED AND THE  
APPLICABLE RATE.

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IDENTIFY PERCENTAGES OR FACTOR: DO NOT LIST  
DOLLAR AMOUNTS.

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## INDEPENDENT RESEARCH AND DEVELOPMENT (IR&amp;D) OR BID AND PROPOSAL (B&amp;P) COSTS

1. If IR&D and B&P costs are expected to be allocated to the proposed contract, the following should be completed:

- A. Total expected to be incurred in fiscal year ending

(FYE) \_\_\_\_\_

B&P: \$ \_\_\_\_\_

IR&D: \$ \_\_\_\_\_

- B. Amount expected to be allocated to all DOE contracts and subcontracts for

FYE \_\_\_\_\_

B&P: \$ \_\_\_\_\_

IR&D: \$ \_\_\_\_\_

2. If the total amounts of B&P and IR&D in B above total \$100,000 or more, the following data should also be provided:

	<u>Date</u>	<u>Sales</u>	<u>B&amp;P</u>	<u>IR&amp;D</u>	<u>Expected % of IR&amp;D of Benefit to DOE</u>
Projected					
Current FYE:	_____	\$ _____	\$ _____	\$ _____	_____ %
First Prior FYE:	_____	\$ _____	\$ _____	\$ _____	_____ %
Second Prior FYE:	_____	\$ _____	\$ _____	\$ _____	_____ %
Third Prior FYE:	_____	\$ _____	\$ _____	\$ _____	_____ %

In addition, a listing of the planned IR&D projects for the current year along with the expected cost for each should be provided so they may be evaluated for benefit to the DOE program and subsequently negotiated for allowability to the DOE contracts.

3. If the total amounts of B&P and IR&D allocated to all DOE contracts in your prior fiscal year exceeded \$5.4 million, an advance agreement will be required.

## PRE-AWARD ACCOUNTING SYSTEM SURVEY

This accounting system review is designed to determine the adequacy and suitability of a contractor's accounting system and practices for accumulating costs under the type of Government instrument to be awarded. The Offeror(s) and each subcontractor whose total proposed costs exceed \$100,000 shall complete the attached accounting system survey. The form should be completed and signed by an individual familiar with the capabilities of the organization's accounting system.

Does the Accounting System provide for:	<u>YES</u>	<u>NO</u>
1. Proper segregation of direct costs from indirect costs?	___	___
2. Identification and accumulation of direct costs by contract? Under a job order cost system, subsidiary cost records for each individual contract are generally available?	___	___
3. A logical and consistent method for the allocation of indirect costs to intermediate and final cost objectives?	___	___
4. Accumulation of costs under general ledger control?	___	___
5. A timekeeping system that identifies employees' labor by intermediate or final cost objectives?	___	___
6. A labor distribution system that charges direct and indirect labor to the appropriate cost objectives?	___	___
7. Interim (at least monthly) determination of costs charged to a contract through routine posting of books of account?	___	___
8. Exclusion from costs charged to Government contracts of amounts which are not allowable pursuant to FAR Part 31, Contract Cost Principles and Procedures, or other contract provisions?	___	___
9. Identification of costs by contract line item if required by the proposed contract?	___	___

PRINTED NAME  
AND TITLE: \_\_\_\_\_

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_

U.S. DEPARTMENT OF ENERGY (DOE)  
NATIONAL PETROLEUM TECHNOLOGY OFFICE (NPTO)  
(Formerly Bartlesville Project Office)

## ENVIRONMENTAL ASSESSMENT QUESTIONNAIRE

**I. PROJECT DESCRIPTION**

Solicitation No. \_\_\_\_\_

Program Area \_\_\_\_\_

Proposer \_\_\_\_\_

Principal Investigator \_\_\_\_\_

Project Title \_\_\_\_\_

Project Duration \_\_\_\_\_

Where appropriate, indicate "N/A" for "Not Applicable." If however, you are asked to provide quantities on a list of items and there will be none, indicate "None". For projects which are exclusively paper studies or library/literature searches or involve laboratory analysis activities, but not field activities, only Sections I and III of this Environmental Assessment Questionnaire are required.

**II. ENVIRONMENTAL IMPACTS**

1. Provide a local area map with the site location marked and a project site plan with topographic lines.

2. Project Location:

City: \_\_\_\_\_

County: \_\_\_\_\_

State: \_\_\_\_\_

3. Present usage of project site (e.g., industrial, commercial)

\_\_\_\_\_  
\_\_\_\_\_

4. Will the proposed project cause a change in the land use practices at the site or in the local area of the site?

\_\_\_\_ Yes      \_\_\_\_ No

If yes, explain how? \_\_\_\_\_

\_\_\_\_\_

5. Is the site an, [ ] attainment, [ ] non-attainment area as designated by EPA under the National Ambient Air Quality Standards?
6. What authority (please name federal, state, and local) regulates the air quality in the project area?
- \_\_\_\_\_
7. List the contact person, address, and telephone number for each cognizant agency in 6. above.
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
8. Describe the local climate. \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
9. What type and quantity of air emissions are anticipated from the project? \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
10. What laws regulate air emissions in the project area (please identify federal, state, and local)?
- \_\_\_\_\_
- \_\_\_\_\_
11. What types and quantity of non-toxic, non-hazardous solid wastes are expected to be produced by the project?
- \_\_\_\_\_
- \_\_\_\_\_
12. What disposal methods will be used? \_\_\_\_\_
- \_\_\_\_\_
13. What authority regulates your solid waste disposal (please identify federal, state, and local)? List contact person, telephone number, and address for each. \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

14. Is the proposed site in a flood plain?      ☐ Yes      ☐ No

If yes, give elevations of 100 and 500 year floods. \_\_\_\_\_

\_\_\_\_\_

15. Is the proposed project in or near a wetland?      ☐ Yes      ☐ No

If yes, please identify. \_\_\_\_\_

\_\_\_\_\_

16. What body of water, i.e., river, lake accept storm water run-off from the proposed site?

\_\_\_\_\_

17. Will the project require diverting a flowing body of water or alter drainage patterns?

☐ Yes      ☐ No

If yes, please describe. \_\_\_\_\_

\_\_\_\_\_

18. Is storm water run-off regulated?      ☐ Yes      ☐ No

If yes, by whom? List contact person, telephone number, and address. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

19. What authorities regulate water quality in the project area (please identify federal, state, and local)?

List contact person, telephone number, and address for each. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

20. Please identify any known faulting in the project area. \_\_\_\_\_

\_\_\_\_\_

21. Please describe the soil type and productivity at the project site. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

22. Describe the indigenous flora and fauna in the project area. \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



23. What state/federal listed threatened or endangered species are in the project area?

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24. What is the population in the project area? \_\_\_\_\_

25. What are the personnel requirements for the project? \_\_\_\_\_

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26. Are these personnel available locally?        ☐ Yes    ☐ No

If no, how many new personnel will the project bring to the area. \_\_\_\_\_

27. Name any places registered on the National Register of Historic Places, on or near the project site.

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28. Describe any archaeologically significant findings on or near the project site.

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29. Has there been a historical or archeological survey of the project site?

☐ Yes    ☐ No

If yes, by whom? \_\_\_\_\_

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30. What RCRA or TSCA listed hazardous/toxic substances will be used in the project? \_\_\_\_\_

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31. Describe your permitting and disposal system for the wastes listed in 30 above. \_\_\_\_\_

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32. Describe any increases in ambient noise levels, odors, or thermal energy releases. \_\_\_\_\_

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33. Describe any scenic vistas or aesthetic landscapes in the project area. \_\_\_\_\_

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34. What water resources are required by the project? \_\_\_\_\_

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### III. CERTIFICATION

I hereby certify that the information provided herein is current, accurate and complete as of the date shown immediately below.

DATE:        \_\_\_\_ / \_\_\_\_ / \_\_\_\_  
                 month   day   year

SIGNATURE: \_\_\_\_\_

TYPED NAME: \_\_\_\_\_

TITLE: \_\_\_\_\_

ORGANIZATION: \_\_\_\_\_